Department of Health and Human Services
Health Resources and Services Administration

1997 Report of Center Specific Graft and Patient Survival Rates

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UNOS

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1997 REPORT
OF
CENTER SPECIFIC
GRAFT AND PATIENT
SURVIVAL RATES

LUNG VOLUME

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PREFACE

The United Network for Organ Sharing (UNOS) operates the national Organ Procurement and Transplantation Network (OPTN) and the national Scientific Registry of Transplant Recipients. In this role, UNOS functions as both a contractor for the Federal Government and as a private, non-profit corporation. Under contract with the Health Resources and Services Administration, UNOS has operated the OPTN since September 30, 1986, and the Scientific Registry since September 30, 1987.

Under the terms of the Transplant Amendment Act of 1990, UNOS is required to determine center specific transplant survival rates for all solid organ transplants performed within the United States and provide this information to the Division of Transplantation. This *1997 Report of Center Specific Graft and Patient Survival Rates* represents the third biennial report, based largely on scientific Registry data, compiled and analyzed from January 1, 1988, through April 30, 1994.

There are 7 volumes in this report: 6 Organ Specific Volumes and 1 Executive Summary. The *organ specific volumes* contain a summary of the national graft and patient survival outcomes for each organ, as well as a description and distribution of the donor and recipient characteristics among programs. Included in each organ specific volume is a *User's Guide* which provides guidance on how to read the data and use the report. The *Executive Summary* condenses the primary results from each organ specific volume and describes the technical methods used in creating this report.

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Publications based upon UNOS data in this report or supplied upon request must include the above citation as well as the following statement:

The data and analyses in the 1997 Report of Center Specific Graft and Patient Survival Rates have been supplied by UNOS. The authors alone are responsible for the reporting and interpretation of these data.

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This report has been compiled through the collective efforts of many individuals. For their assistance, UNOS thanks Judith Braslow, Gwen Mayes, and Remy Aronoff of the Division of Transplantation, Office of Special Programs, Health Resources and Services Administration, U.S. Department of Health and Human Services.

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I. USER'S GUIDE

About the Center Specific Report
About the Organ Specific Volumes
Glossary of Terms
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Where to Go For Help

I. USER'S GUIDE

A. ABOUT THE 1997 REPORT OF CENTER SPECIFIC GRAFT AND PATIENT SURVIVAL RATES

Under the terms of the Scientific Registry contract with the Federal government and the 1990 Transplant Amendment Act, the United Network for Organ Sharing (UNOS) is required to determine and report program specific transplant survival data every two years. *The 1997 Report of Center Specific Graft and Patient Survival Rates* comprises seven volumes:

1. Executive Summary
2. Kidney volume
3. Liver volume
4. Pancreas volume
5. Heart volume
6. Lung volume
7. Heart-Lung volume

The Executive Summary -- This document condenses the primary results from each organ specific volume and describes the technical methods used in creating this report.

Organ specific volumes --These six volumes, one for each organ, form the core of the *1997 Report.* Each volume contains (1) a User's Guide, which provides guidance on how to use the report and interpret the data tables, (2) a summary of the national graft and patient survival outcomes, and (3) transplant program specific data: a survival rates table, a chart describing the distribution of risk factors for the transplant program and the nation and, in some cases, a written narrative provided by the transplant program.

The *1997 Report*:

- Includes U.S. transplant data from January 1, 1988, through April 30, 1994. Excluded from these data are multi-organ transplants (except for kidney-pancreas and heart-lung transplants), heterotopic heart transplants, and living donor transplants (except for kidney).

- Adjusts for recipient and donor risk factors for each organ specific risk model (see Table I-1).

- Emphasizes short term as well as long term survival. Short term survival is defined at two time points, 1 month and 1 year following transplant. Long term survival is defined in two ways, as unconditional 3 year survival, and conditionally, as survival at 3 years post-transplant for grafts or patients who survive 1 year.

  The long-term conditional survival analysis provides an assessment of factors independent of those limited to the first year (e.g., the risk of surgical procedures and early acute rejection events).

- Presents actual and expected graft and patient survival rates separately.

- Shows survival rates for two time periods (i.e., eras). Era 1 is from January 1, 1988, to April 30, 1992. Era 2 is from May 1, 1992, to April 30, 1994. *Era specific survival rates allow assessment of whether a program's performance improves over time.* Three year survival analysis is only possible for data from Era 1 due to insufficient follow-up on patients who received transplants in Era 2.

B. ABOUT THE ORGAN SPECIFIC VOLUMES

There are six organ specific volumes in this report: one for kidney, liver, pancreas, heart, lung, and heart-lung. Each volume first presents a general summary of the key results from the analysis, including:

- a synopsis of the data quality, the number of transplants and outcomes studied;

- a description of statistical models used to describe the impact of donor and patient risk factors on survival and predict each program's expected survival rates at each time point of interest; and

- a summary of the national survival rates over time.

Each volume then shows specific survival data for each transplant program, listed by state. The data are presented in three parts:

1. Graft and Patient Survival Rates
2. Patient and Donor Characteristics
3. A Narrative Response From Each Transplant Program

Guidance on how to read the data and appropriate examples are described below.

Table I-1. Recipient and Donor Risk Factors Considered in the Lung Models

Recipient and Donor Factors Initially Considered	In the Final Survival Models?	
	Short-term	Long-term
Transplant Procedure Type (single or double lung)	Yes	No
First or Repeat Transplant	Yes	No
Recipient Age	Yes	Yes
Recipient Gender	Yes	No
Recipient Race	Yes	Yes
Recipient Medical Condition at Transplant	Yes	No
Recipient Medical Diagnosis at Transplant	Yes	Yes
Recipient on Ventilator at Transplant	Yes	No
Hours of Cold Storage Time (Cold ischemic time)	Yes	Yes
Donor Age	No	No
Donor Gender	Yes	No
Year of Transplant Performed	Yes	No

C. GLOSSARY OF TERMS

The general terms and definitions listed below are used throughout this report. For a list of key terms used in the survival rates tables, please see page 4.

Center or Hospital -- A facility which may have one or several transplant programs (e.g. one center with separate kidney, liver, and heart transplant programs).

Center Effect -- The quality of a transplant program. In this report, the center effect is quantified by the difference between a program's actual and expected survival rates (See page 3 for definitions of actual and expected survival rates).

Clinical Significance -- This indicates that an effect that is medically important regardless of whether or not it achieves statistical significance.

Coefficient -- A number estimated in a statistical model that describes the mathematical relationship of a characteristic (e.g., age) to the outcome of interest (e.g., graft failure).

Cohort -- The observations selected for a study based on a specific time period. In this report, the overall cohort is defined as all transplants and patients between January 1, 1988, and April 30, 1994.

Cold Ischemic Time -- The time between the retrieval of the organ from the donor and transplantation into the recipient.

Conditional 3 Year Survival -- In this report, it refers to the survival at 3 year post-transplant for those who survived at least 1 year.

COPD -- Chronic Obstructive Pulmonary Disease.

Covariate or Factor -- A characteristic (e.g., age, race) considered in the statistical analysis.

Double Lung Transplant -- When both lungs from a single donor are transplanted into a recipient.

Era 1 -- January 1, 1988 - April 30, 1992.

Era 2 -- May 1, 1992 - April 30, 1994.

FU -- Follow-up.

Graft -- The transplanted organ.

Logistic Regression Model -- A statistical model used to estimate the chance of occurrence of an event.

In this report, it is applied to estimate the chance of graft or patient failure at specific time points following transplantation. Thus, it can be used to determine the expected survival rates for a transplant program.

Odds -- The relative chance in favor of one event over the other. For instance, the odds of graft failure refers to the chance of graft failure relative to the chance of graft functioning.

Odds Ratio -- The ratio of the odds for two groups. For example, if the odds ratio of graft failure for repeat versus primary transplants is 1.40, that means the odds of graft failure for repeat transplant is 40% greater than the odds of graft failure for primary transplant.

Program -- Individual organ transplant department (e.g., kidney program, liver program).

P- Value -- see page 4 for definition.

Reference Group -- A group (e.g. White, male) chosen for each characteristic (e.g., race, gender) considered in the analysis with which the other groups (e.g., Black, Hispanic, female) can be compared. As a general rule, the largest group or the mean of the covariate (e.g., mean recipient age) is often used as the reference group.

Single Lung Transplant -- When only one lung from a donor is transplanted into a recipient.

Statistical Significance -- When a statistical test is rejected, the finding is statistically significant. For example, one of the hypotheses in this report is that an individual "center effect" does not exist for a particular transplant program. When the data show enough evidence to reject the hypothesis, the "center effect" is statistically significant for this transplant program. Often, the p-value provides a measure of statistical significance (also see page 4 for more details on p-value and statistical significance).

Standard Error -- A statistic that describes the degree of uncertainty that the estimated coefficient is accurate (also see "coefficient" above). The higher the standard error is, the less certain we are that the estimated coefficient is accurate.

TX -- Transplant.

D. HOW THE PROGRAM SPECIFIC DATA ARE PRESENTED

Graft and Patient Survival Rates

The data tables presented in this report should be used to find both the graft and patient survival rates at various time intervals. **Graft survival** refers to the percentage of grafts (i.e., transplanted organs) that are still functioning at a given time point after transplant. **Patient survival** refers to the percentage of patients who are alive at a given time point after transplant. Graft and patient survival rates do not necessarily correspond. It is possible to obtain a higher patient survival rate than graft survival rate within the same group of patients at a transplant program. For example, a patient's original lung graft might fail, but the patient can still survive through subsequent retransplantation. For vital organ transplants such as livers, hearts and lungs, graft and patient survival are more likely to correspond, as organ failure in these patients often means death.

In this report, graft and patient survival rates are given at 1 month, 1 year and 3 years. The 3 year survival rate is defined in two ways, as survival at 3 years conditional on survival at 1 year post-transplant, and at 3 years unconditionally. The focus of the long term analysis is on the conditional 3 year survival rates (see page 1).

Actual survival rate is the percentage of grafts (or patients) that survived at that transplant program for the designated period of time. In the example in Table I-2, the actual overall 1 month graft survival rate for patients who received a heart-lung transplant at ABC Hospital is 85%. This means that among all of the patients who received heart-lungs at this hospital, 85% of the grafts were still functioning 1 month after transplant. This rate is statistically adjusted if a program had incomplete follow-up information on some of its patients.

Although the actual survival rate is valuable information, by itself it can be misleading because it is a function of both the effectiveness or quality of the services at a program *and* the characteristics of the patients at that program. For example, suppose that the patients who received heart-lung transplants at ABC Hospital were older or sicker than the patients at XYZ Hospital. These patient characteristics would likely result in a lower survival rate for ABC Hospital, even if both hospitals had equally effective transplant programs.

Expected survival rate is the survival rate expected after adjusting for recipient and donor characteristics such as race, age, and gender. Used to provide a more accurate interpretation of the actual survival rate, it is calculated using a sophisticated statistical procedure. First, risk factors are identified by fitting a mathematical model using the entire nation's transplant survival data to determine how these diverse factors are related to graft and patient survival. Then, each patient's expected survival rate is computed based on the national model. Finally, these expected survival rates are averaged over the patients from ABC Hospital to obtain ABC Hospital's expected survival rate.

A positive difference between the actual and expected survival rates indicates that the program's actual rate is above the national survival rate for transplant patients and donors with the same characteristics. A negative difference between the actual and expected survival rates indicates that the program's actual rate is below the national survival rate for transplant patients and donors with the same characteristics.

Please note that actual survival rates which differ from expected survival rates are not always statistically significant and even statistically significant differences may not be clinically significant.

For instance, in Table 1-2, the overall 1 year actual graft survival rate of 76.9% is higher than the expected graft survival rate of 73.4%. One might conclude that this heart-lung program had a 1 year graft survival rate that was better than the national survival rate given the same patient characteristics.

Key Terms Used in the Survival Rates Tables

Actual Survival Rate (Act. Rate) -- The percentage of patients who survived or grafts that functioned without failure for a given period of time after transplant. This rate is statistically adjusted if a transplant program's follow-up data are incomplete (see *Technical Methods* section of the *Executive Summary* for more details).

Expected Survival Rate (Exp. Rate) -- The survival rate expected at each program after adjusting for the indicated risk factors discussed in each organ specific volume of the report. In general, programs performing a large percentage of transplants on high risk patients have lower expected survival rates.

Difference in Rates (Diff.) -- The difference between the actual survival rate and the expected survival rate. A negative difference indicates that the actual rate is below the expected rate. A positive difference indicates that the actual rate is above the expected rate.

Number with Complete Follow-Up Data (No. w/CFU) -- The number of patients or grafts for which the status of the patient or transplanted graft was known at the end of the specified time interval (e.g., known status at 1 year post transplant).

Number Died (No. Died) -- The number of patients who died within a specified time interval.

Number Failed (No. Failed) -- The number of grafts that failed within a specified time interval.

Number of Patients (No. of Pts.) -- The number of patients transplanted at the transplant program, used to calculate patient survival rates at 1 month, 1 year, or 3 years, both unconditional and conditional on survival to 1 year. *Please Note*: For conditional 3 year survival rates, this number excludes those patients that either died or were lost to follow-up during the first year following the date of transplant. The number of patients in Era 1 and Era 2 may not add up to the total number of patients in the overall period. This is due to multiple transplants in different eras for some patients. For example, if a patient had her first transplant in Era 1 and a second transplant in Era 2, she would be counted twice, once in each era, in calculating the era-specific survival rates but only once in calculating the overall survival rate.

Number of Transplants (No. of TX) -- The number of transplants performed at the transplant program, used to calculate graft survival rates at 1 month, 1 year, or 3 years, both unconditional and conditional on survival to 1 year. *Please Note*: For conditional 3 year survival rates, this number excludes those grafts that either failed or were lost to follow-up during the first year following the date of transplant.

P-value -- The p-value provides a measure of statistical significance. The smaller the p-value, the less likely an observed measurement is due to chance alone. A p-value of less than 0.05 (<0.05) means that

there is a statistically significant difference between the actual survival rate and the expected survival rate. (See *Chance Differences and Statistical Significance* below for a detailed explanation of statistical significance.)

Time Point -- The specific time at which survival is calculated, either at 1 month, 1 year, or 3 years conditionally and unconditionally following transplant.

Chance Differences and Statistical Significance

In comparing expected and actual survival rates, it is important to pay attention to both the size of the difference and the number of transplants on which these survival rates are based.

Suppose the expected survival rate is 70% at ABC Hospital and its actual survival rate is 68%. This two percent difference is so small that it does not have much clinical significance. Even if it were statistically significant you probably would not want to base any decisions on which transplant program to use based on this difference. On the other hand, if the two rates were 70% and 60%, you might feel safer receiving a transplant at a program with a higher actual than expected survival rate for the type of transplant that you need.

It is also important to note the number of transplants that a program has done. The more transplants performed, the more confident you can be that the difference between actual and expected survival rates reflects the quality of the program rather than accidental factors or chance.

For example, suppose that ABC Hospital has an expected survival rate of 60% and an actual survival rate of 80%. If ABC has done only five transplants, you would not be very confident that its actual survival rate is higher than the average for other programs. It may be due to chance that the five patients who received their transplants at ABC were very strong people and, therefore, survived their operations. However, if ABC has done 500 transplants and its survival rate is 10 percentage points above its expected rate, it would be very unlikely that this was due to chance occurrence. You would be more confident that the difference reflects a real difference in quality between ABC Hospital and other programs.

When a difference between an expected and an actual survival rate is large and is based on many transplant cases, statisticians call the difference "statistically significant." Statistically significant differences are unlikely to be caused by chance factors and are likely to reflect a true difference between actual and expected survival rates.

There are statistical tests used to determine when a difference is statistically significant. One such test is used with the program specific survival data presented in this report. Look at the last column in the survival tables, marked "p-value." When this value is low, the difference between the actual and expected survival rate for that program is statistically significant. Very low p-values are .01, .02, .03, .04, and .05. Marginally low p-values, values that are close to significance, are .06, .07, .08, .09, and .10. Keep in mind that p-values are only approximate, especially those based on a few transplant cases. *For purposes of this report, differences with a p-value less than .05 are considered statistically significant.*

There are two further cautions in interpreting statistical significance:

1. If a program has done a great many transplants, even a very small difference between actual and expected rates can be *statistically significant.*

2. However, if a program has done a great many transplants, very small differences are probably not *clinically significant*, and therefore are not large enough to influence the choice of a transplant program. Clinical significance means the difference is large enough to have practical importance for someone choosing a transplant program.

For additional information on the study methods, see the *Technical Methods* section in the *Executive Summary.*

Donor and Recipient Characteristics

The second section of each transplant program's data consists of a table comparing donor and recipient characteristics of the transplant program's patients to those same characteristics among transplant programs nationwide. The information provided in this table varies by organ.

Table I-2. Example of Graft and Patient Survival Rates Table

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for America Medical Center - Anywhere
Provider Number 000000 (ABC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No.[1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p-[2] value
1 Month	44	84.5	78.9	44	85.1	83.6	88	84	13	84.5	80.7	3.8	0.03
1 Year	44	62.1	71.4	44	80.9	76.6	88	75	26	67.9	73.4	-5.5	<0.01*
Cond[3] 3 Years	25	68.5	89.9				25	18	7	68.5	74.5	-6.0	0.17
3 Years[3]		42.5	64.2										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No.[1,5] w/CFU	No.[5] Dead	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p-[2] value
1 Month	44	91.4	86.1	43	91.2	89.5	87	83.0	12.0	85.5	87.4	-1.9	0.04
1 Year	44	62.1	80.4	43	88.4	84.2	87	74.0	25.0	66.2	81.9	-15.7	<0.01*
Cond[3] 3 Years	25	68.5	90.9				25	18.0	7.0	72.0	72.3	-0.3	0.33
3 Years[3]		42.5	73.1										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) for whom (which) the status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Table I-3. Example of Donor and Recipient Characteristics Table

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

America Medical Center - Anywhere
Provider Number 000000 (ABC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		88	100.0	2135	100.0
Donor Gender	Female	40	45.4	633	29.6
	Male	48	54.5	1502	70.4
Donor Age	0-5	7	7.9	33	1.5
	6-10	5	5.7	54	2.5
	11-17	15	17.0	449	21.0
	18-35	41	46.6	1104	51.7
	36-49	17	19.3	410	19.2
	50+	3	3.4	85	4.0

In the example in Table I-3, the transplant program performed a total of 88 lung transplants between January 1, 1988, and April 30, 1994. Of these, 17% received lungs from donors aged 11-17. This is 3% lower than the national percentage of 21.0%. As a result, the actual survival outcomes for this program might be a little lower than the national average had all other variables been equal, since survival for organs from adolescent donors is generally higher than that from older donors.

Optional Narrative Response From Each Transplant Program

The narrative response represents the transplant program's interpretation of its graft and patient survival rates. It has been submitted by the transplant program and has not been edited except to remove patient identifiers. The narrative response explains in detail those factors unique to the transplant program's performance which may not be reflected in the data as they are reported. For example, a transplant program may have had a change in staff which temporarily affected the number of patients that were transplanted. **Not every transplant program provided a statement.**

Table I-4 on the next page is a hypothetical example of a narrative response from a transplant program.

E. WHAT TO REMEMBER WHEN USING THE REPORT

When using the *1997 Report of Center Specific Graft and Patient Survival Rates* you should remember that:

- Caution should be exercised in comparing one program to another because each program may reflect a special patient and donor pool. Conclusions should be based not only on the *Survival Rates Table* but also on the *Donor and Recipient Characteristics Table* and the optional *Narrative Response* provided by the transplant program.
- The *actual* survival rate may be misleading by itself because the actual survival rates are reflective of both the quality of the services at a program and the characteristics of the patients at that program.
- The *expected* survival rates show what survival rates are to be expected at a program if its patient and donor characteristics are taken into account.

Table I-4. Example of Narrative.

The Transplant Program at XYZ Hospital
Public Comment Response

XYZ Hospital began performing lung transplants in December of 1987. From January 1, 1988 to April 30, 1994, we performed 90 lung transplants, two of which were living donor transplants.

Our actual graft and patient survival data were nearly equivalent to our statistically expected outcomes. Our results were significantly affected by one untimely death in the early post-operative period. This death was associated with complications related to immunosuppression and not related specifically to the heart-lung transplant per se. Had we not experienced this mortality, our patient survival and graft outcome data would have been even better.

We are pleased with the growth and progress of our transplant program, here at XYZ Hospital. One of our limiting factors is the number of patients we can serve versus the ongoing problems of obtaining adequate numbers of organs for transplantation.

XYZ Hospital transplant program worked hard to meet the criteria to become a member of UNOS for heart, lung, and heart-lung transplants. We are proud of our transplant program and will continue to provide the highest patient care available anywhere.

E. T. Smith, M.D.
Director of Transplantation

However, not all of the factors affecting graft and patient survival are included in the analysis. There may be other factors which have an impact on survival rates that are not included in this report.

- For the large majority of transplant programs, the difference between actual and expected survival rates was not statistically significant.
- The number of transplants performed at a program is an important factor to consider when evaluating survival rates. In general, the more transplants a program has performed, the more closely the survival rates reflect the quality of the program.

Patients and their families also should consider other factors in selecting a transplant program, such as:

- The experience, training, and education of the transplant team and the medical and nursing care available throughout the process -- from candidate evaluation through transplantation and follow-up.
- The costs of the transplant procedure, physician services, hospitalization, and medications.
- The proximity of the transplant program to home and how easily it can be reached.
- The friends and family available for assistance before, during, and after the transplant.
- The quality and availability of post-transplant services.

F. WHERE TO GO FOR HELP

Personal physician -- One of the most valuable resources for interpreting the data in the *1997 Report of Center Specific Graft and Patient Survival Rates* is a personal physician. Even if the physician does not have a copy of the report, s/he should be able to explain the differences between the types of data reported for the specific transplant programs of interest.

The Transplant Program -- Information about a transplant program's graft and patient survival rates should be available upon request of the transplant program. You might seek assistance from the

transplant surgeon or physician, transplant coordinator, or social worker.

National Organ Procurement and Transplantation Network (OPTN) and the Scientific Registry of Transplant Recipients -- UNOS maintains the OPTN and the Scientific Registry and can be contacted for information about the report and for assistance with data interpretation. Please contact:

All ***Patient*** inquiries: (888)TXINFO-1

Research inquiries: UNOS Data Request Line -- (804)330-8576 (phone) or (804)323-3794 (fax)

Media inquiries: (804) 327-1432

UNOS also maintains a **Web site** on the Internet from which visitors can retrieve the latest UNOS statistics, patient information, press releases, policies and by-laws, and other information pertinent to transplant professionals, the media, and the general public. The address is: **www.unos.org.**

UNOS also is producing the *1997 Report of the OPTN: Waiting List Activity and Donor Procurement*. The purpose of this report is to provide information relating to donor procurement and waiting list activity, including median waiting times to transplant and percentage transplanted for the U.S. as well as each UNOS region and every OPO. Used in conjunction with the *1997 Report of Center Specific Graft and Patient Survival Rates*, patients and their families will have information on donor procurement rates and estimated waiting time to transplant given various patient clinical or demographic characteristics for each OPO and waiting list activity data for transplant centers within each OPO.

UNOS also has resource packets available for transplant patients or family members. These packets include brochures on the organ allocation process and questions patients should ask a transplant program, information on financial issues for transplant patients, summary transplant statistics and details on obtaining more specific information from UNOS.

Beginning in 1998, transplant centers will provide a resource packet to every patient accepted for transplantation. In addition, UNOS maintains a toll-free request line (1-888-TXINFO-1) for anyone wishing to receive this information separately.

The Federal Government -- The *1997 Report of Center Specific Graft and Patient Survival Rates* was prepared by UNOS and was funded in part by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Office of Special Programs, Division of Transplantation. For information on how to obtain a copy of the report, contact:

Health Resources and Services Administration
Office of Special Programs
Division of Transplantation
5600 Fishers Lane
Parklawn Bldg., Room 7-29
Rockville, Maryland 20857 USA
(301) 443-7577

II. SUMMARY CHAPTER

Introduction
Completeness of Follow-Up Data and Survival Rates
Percentages of Actual and Expected Graft Survival Rates
Percentages of Actual and Expected Patient Survival Rates
Donor and Recipient Characteristics
Impact of Characteristics on Short Term Survival
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II. LUNG TRANSPLANT SURVIVAL RATES

For the Summary of this chapter, see page 23. For definitions of any terms used here, please refer to the User's Guide, beginning on page 2.

A. INTRODUCTION

This report of lung transplant survival rates is based upon verified Scientific Registry data for 2,135 transplants involving 2,079 patients from 75 lung transplant programs in the United States. Each program reporting at least one lung transplant between January 1, 1988, and April 30, 1994, was included. Multi-organ and living donor transplants were excluded.

Short term survival is defined as survival at 1 month and 1 year post-transplant. Short term survival rates are based on all transplants in the study for which there are follow-up data.

Long term survival is defined in two ways:

- unconditional survival at 3 years post-transplant, and
- survival at 3 years post-transplant for those who survived at least 1 year, referred to as **conditional 3 year survival**.

The long term survival rates are based on all transplants between January 1, 1988, and April 30, 1992, for which there are follow-up data. This cohort was chosen to ensure that the maximum number of transplants with follow-up data was used to determine long term survival rates. Please note this report emphasizes *conditional* 3-year survival rates. This is because the conditional 3-year analysis assesses characteristics independent of those limited to the first year (e.g., surgical complications and early acute rejection events).

B. COMPLETENESS OF FOLLOW-UP DATA AND OVERALL GRAFT AND PATIENT SURVIVAL RATES

For graft survival, completeness of follow-up data and overall actual survival rates at each time point are shown in Table II-1; patient survival data are shown in Table II-2.

Patient (graft) follow-up data were considered complete when:

- the patient was alive (lung was functioning) and the duration of survival (function) was equal to or exceeded the specified time after transplant (i.e., 1 month, 1 or 3 years), or
- the patient died (lung failed) and a valid date of death (failure) was reported.

The percentages of complete follow-up data ranged from a low of 95.2% for the conditional 3 year time point to a high of 99.5% for the 1 month time point. Patient survival rates are similar to graft survival rates since patient death follows graft failure unless the patient is retransplanted.

Overall survival rates also are presented in the tables. Patient survival rates are comparable to graft survival rates because patient death usually follows graft failure. If a graft had incomplete follow-up data, the observation was weighted to account for the time during which the graft was known to be functioning. Therefore, the actual graft survival rate reflects the weighted proportion of grafts functioning at the specified time interval. Patient survival rates were computed in a similar way (see the *Technical Methods* chapter of the *Executive Summary*).

In the cohort of transplants (1/1/88 - 4/30/92) used to compute conditional 3 year survival rates, patients (grafts) who did not survive to 1 year after transplant were excluded from the analyses. Therefore, the total number of patients (grafts) for the conditional 3 year analysis was less than that for the 1 month and 1 year analyses.

Please note that the conditional 3 year graft and patient survival rates in Tables II-1 and II-2, and in each program specific survival table, may be higher than the 1 year graft survival rates. This is possible because the conditional 3 year survival rate is the 3 year survival rate for patients (grafts) who (which) survived at least 1 year post-transplant.

For example: Program A performed a total of five

transplants between 1/1/88 and 4/30/92. Two of the lungs failed prior to 1 year post-transplant and the remaining three lungs survived to 3 years after transplant. In this example, Program A has a 1 year graft survival rate of 60% (3 out of 5 lungs were functioning at 1 year post-transplant). However, the conditional 3 year survival rate for Program A is 100% because all three lungs that were functioning at 1 year after transplant also were functioning at 3 years post-transplant. The same calculations are used for patient survival. See the *Technical Methods* chapter of the *Executive Summary* for more specific definitions of follow-up data and the calculations for actual graft and patient survival.

Overall Graft and Patient Survival Rates by Era

In this report, short term survival also is reported by era. Separate eras were used to determine whether there were any improvements over time in the short term survival rates. Era 1 is defined as all transplants occurring between January 1, 1988, and April 30, 1992; Era 2 includes all transplants occurring between May 1, 1992, and April 30, 1994. The overall graft and patient survival rates by era are presented in the last two columns of Table II-1 and Table II-2, respectively. The results demonstrate substantial improvement for both graft and patient survival rates over time.

C. GRAFT SURVIVAL -- PERCENTAGES OF ACTUAL AND EXPECTED SURVIVAL RATES

For each transplant program, actual and expected survival rates were calculated at 1 month, 1 year, and 3 years conditional on survival at 1 year. Survival rates at each time point were determined using a specific cohort of transplants (shown in Tables II-1 and II-2). Expected survival rates were determined for each transplant program based on its specific patient and donor characteristics. These expected outcomes were statistically adjusted for many important prognostic variables, or covariates, that were used in the survival analysis. In other words, they take into account many different characteristics that affect survival. For example: if Program A transplanted many more "high risk" recipients than Program B, then Program A would have a lower *expected* survival rate than Program B.

Table II-1. Completeness of Graft Follow-Up Data and Actual Survival Rates for Lung Transplants

Time	Cohort	Number of Transplants	Percent with Follow-Up Data	Graft Survival (%)		
				Overall	Era 1	Era 2
1 Month	1/1/88 - 4/30/94	2,135	99.5	86.8	83.5	89.3
1 Year	1/1/88 - 4/30/94	2,135	98.7	70.4	66.6	73.4
Cond. 3 Years	1/1/88 - 4/30/92	608	95.4	74.7*	74.7*	N.A.*

Table II-2. Completeness of Patient Follow-Up Data and Actual Survival Rates for Lung Transplants

Time	Cohort	Number of Patients	Percent with Follow-Up Data	Patient Survival (%)		
				Overall	Era 1	Era 2
1 Month	1/1/88 - 4/30/94	2,079	99.5	87.7	84.5	90.0
1 Year	1/1/88 - 4/30/94	2,079	98.6	71.9	68.4	74.5
Cond. 3 Years	1/1/88 - 4/30/92	606	95.2	75.9*	75.9*	N.A.*

* The cohort used to determine the overall conditional 3 year survival rate is the same as the Era 1 cohort. Therefore, the overall conditional 3 year survival rates are identical to the conditional 3 year survival rates for Era 1. There is no conditional 3 year survival rate calculated for Era 2 due to insufficient follow-up data on patients who received transplants in Era 2.

If a program's *actual* survival rate was *greater* than its expected survival rate, this means that the program's actual results were higher than the national results for transplants *with the same donor and recipient characteristics*. If a program's *actual* survival rate was *less than* its expected survival rate, this means that the program's actual results were lower than the national results for transplants *with the same donor and recipient characteristics*. The difference between the actual and expected rate may have occurred by chance and, therefore, may not be statistically significant. Furthermore, even a statistically significant difference, one that most likely did not occur by chance, may not be clinically significant (i.e., medically important). A formal description of the methods used to determine actual and expected survival rates appears in the *Technical Methods* chapter of the *Executive Summary*.

Table II-3 shows the percentages of lung transplant programs by category of graft survival rates, both for actual and expected survival. The majority of the transplant programs had actual survival rates greater than 70% at all time points. At 1 month, 43% of programs had actual survival rates greater than 90%. At 1 year, this fell to 11%. However, this percentage increased to 33% for the conditional 3 year survival rates. The distribution of the expected survival rates shows a similar trend. The results indicate that there are more programs with high survival rates at the conditional 3 year time point than there are at the 1 year time point. *This is because the most critical period of time for graft survival is the first year post-transplant.* Those who survive the first year are more likely to survive 3 years post-transplant.

The percentages of programs by short term graft survival rates and eras, both for actual and expected survival, are summarized in Table II-4. The results demonstrate a substantial improvement in graft survival over time because a greater percentage of programs had actual survival rates higher than 80% in Era 2.

Differences in Actual and Expected Survival Rates

For most programs, the difference between the actual survival rate and the expected survival rate was not statistically significant. Figure II-1 shows the percentages of programs whose actual graft survival rates were either above, not significantly different from, or below expected graft survival rates at three time points. Actual survival rates shown in the figure to be either greater than or less than expected survival rates were statistically significant. Overall, there were more programs that fell significantly below expected results than programs that were significantly above expected results. However, for the majority of the transplant programs, the difference in actual and expected graft survival was not statistically significant and varied little across time points.

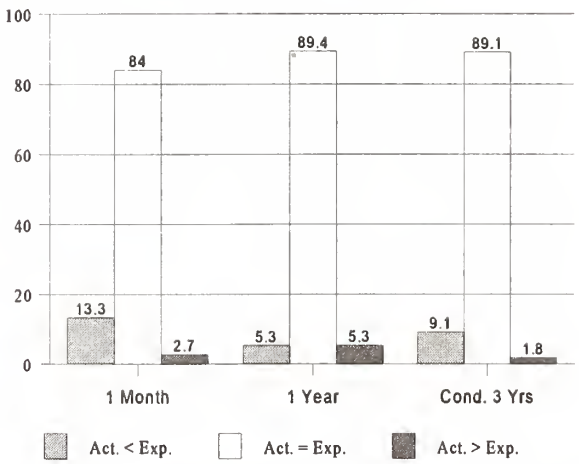
Table II-3. Percentages of Lung Transplant Programs by Graft Survival Rates

Graft Survival Rates (%)	Actual			Expected		
	1 Month (n=75)	1 Year (n=75)	Cond. 3 Yrs (n=55)	1 Month (n=75)	1 Year (n=75)	Cond. 3 Yrs (n=55)
0-60	9.3	28.0	21.8	0.0	8.0	1.8
>60-70	8.0	20.0	18.2	2.7	29.3	18.2
>70-80	10.7	25.3	12.7	5.3	62.7	70.9
>80-90	29.3	16.0	14.6	68.0	0.0	9.1
>90-100	42.7	10.7	32.7	24.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Table II-4. Percentages of Lung Transplant Programs by Graft Survival Rates and Era

Graft Survival Rates (%)	Actual				Expected			
	1 Month		1 Year		1 Month		1 Year	
	Era 1 (n=65)	Era 2 (n=67)	Era 1 (n=65)	Era 2 (n=67)	Era 1 (n=65)	Era 2 (n=67)	Era 1 (n=65)	Era 2 (n=67)
0-60	21.5	4.5	46.2	22.4	0.0	0.0	16.9	3.0
>60-70	3.1	3.0	13.8	17.9	6.2	0.0	58.5	16.4
>70-80	20.0	13.4	16.9	29.9	18.5	0.0	24.6	79.1
>80-90	12.3	17.9	4.6	10.4	64.6	47.8	0.0	1.5
>90-100	43.1	61.2	18.5	19.4	10.8	52.2	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

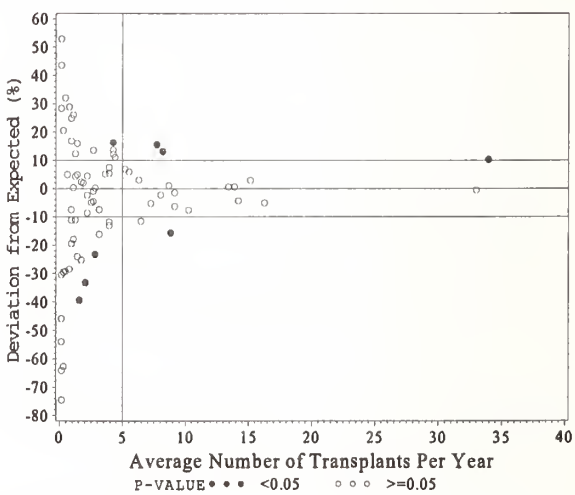
Figure II-1. Percentages of Lung Transplant Programs with Actual Graft Survival Rates Above, Below, or Equal to Expected Survival Rates. *



* Actual survival rates above or below expected survival rates are statistically significant and varied little across time points.

At all time points, the larger differences in actual and expected rates were nearly always seen in programs that reported relatively few transplants during the period. This occurs because programs that do not perform many transplants tend to have highly variable outcomes. To illustrate this, Figure II-2 shows a scatter plot of the average number of transplants per year (transplant volume) versus the difference in 1 year actual and expected graft survival. Nearly all differences greater than 10% (either positive or negative) are found among transplant programs which perform very few transplants per year.

Figure II-2. Lung Transplant Volume vs Difference in Actual and Expected 1 Year Graft Survival Rates.



Please note that actual survival rates which differ from expected survival rates are not always statistically significant and even statistically significant differences may not be clinically significant.

D. PATIENT SURVIVAL -- PERCENTAGES OF ACTUAL AND EXPECTED SURVIVAL RATES

The percentages of programs by patient survival rates for both actual and expected survival are shown in Table II-5; the percentages of programs by survival rates and eras are shown in Table II-6. As with graft survival, the outcomes in Era 2 were better than in Era 1.

Differences in Actual and Expected Survival Rates

Overall, there were more programs that fell significantly below expected results than above expected results (see Figure II-3). However, for the majority of transplant programs, the difference in actual and expected patient survival was not statistically significant and varied little across time points.

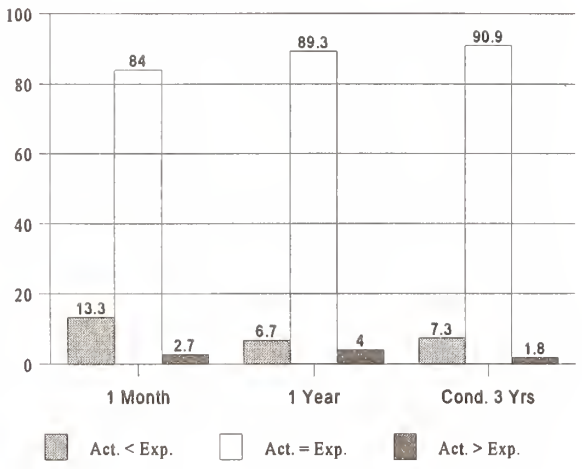
Table II-5. Percentages of Lung Transplant Programs by Patient Survival Rates

Patient Survival Rates (%)	Actual			Expected		
	1 Month (n=75)	1 Year (n=75)	Cond. 3 Yrs (n=55)	1 Month (n=75)	1 Year (n=75)	Cond. 3 Yrs (n=55)
0-70	16.0	46.7	40.0	2.7	29.3	16.4
>70-80	12.0	25.3	10.9	5.3	68.0	74.5
>80-90	24.0	17.3	14.6	60.0	2.7	9.1
>90-95	18.7	0.0	1.8	32.0	0.0	0.0
>95-100	29.3	10.7	32.7	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Table II-6. Percentages of Lung Transplant Programs by Patient Survival Rates and Era

Patient Survival Rates (%)	Actual				Expected			
	1 Month		1 Year		1 Month		1 Year	
	Era 1 (n=65)	Era 2 (n=67)	Era 1 (n=65)	Era 2 (n=67)	Era 1 (n=65)	Era 2 (n=67)	Era 1 (n=65)	Era 2 (n=67)
0-70	23.1	6.0	58.4	38.8	6.2	0.0	66.2	14.9
>70-80	16.9	14.9	18.5	28.4	13.8	0.0	33.8	80.6
>80-90	12.3	17.9	3.1	11.9	66.2	32.8	0.0	4.5
>90-95	10.8	17.9	0.0	6.0	13.8	67.2	0.0	0.0
>95-100	36.9	43.3	20.0	14.9	0.0	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Figure II-3. Percentages of Lung Transplant Programs with Actual Patient Survival Rates Above, Below, or Equal to Expected Survival Rates. *



* Actual survival rates above or below expected survival rates are statistically significant and varied little across time points

E. NATIONAL DISTRIBUTION OF DONOR AND RECIPIENT CHARACTERISTICS

The national distribution of donor and recipient characteristics for lung transplants, presented in percentages, is shown in Table II-7. Each of these donor and recipient characteristics was included in the analyses for graft or patient survival, and used to determine an expected survival rate for each transplant. The transplant types were evenly divided among single left lung transplants (34%), single right lung transplants (33%) and double lung transplants (33%). The majority of lungs transplanted were recovered from white male donors between the ages of 18 and 35 (52%). Most of the lung recipients were white males greater than 50 years of age (41%), and were neither hospitalized (85%) nor on ventilator (94%) prior to transplant. Of the 2,135 lung transplants performed, only 3% were due to repeat transplants. The most common disease diagnoses were Chronic Obstructive Pulmonary Disease (COPD) and Emphysema (33%), followed by Cystic and Idiopathic Fibrosis (27%). In general, cold ischemic time for single lung transplants was shorter than double lung transplants.

Donor and Recipient Trends

There were 1,216 lung transplants performed in the last two years of the study period (Era 2); this represents a 30% increase from the 919 transplants performed in the previous four years (Era 1).

National donor and recipient characteristics changed slightly between Era 1 and Era 2. There was a slight increase in young donors in Era 2, and the percent of donors age 50 and older almost doubled (2.6% to 5.0%). There was also a 3% increase in minority donors. Transplant recipients were older in the second era; those over age 49 comprised 46% of recipients in Era 2 as compared to 34% in Era 1. There were fewer recipients in the ICU at the time of transplant in Era 2 than in Era 1. COPD and Emphysema accounted for 26% of the diseases in Era 1 and increased to 39% in Era 2. Alpha-1-Antitrypsin Deficiency and Primary Pulmonary Hypertension decreased from 17% to 12% and from 13% to 10%, respectively. Also, cold ischemic time increased from Era 1 to Era 2.

Despite more older donors and older recipients in Era 2, the national survival rates at 1 year post transplant improved from Era 1 to Era 2 (See Tables II-1 and II-2 on page 12).

F. SHORT TERM SURVIVAL -- IMPACT OF DONOR AND RECIPIENT CHARACTERISTICS

To determine the expected survival for each transplant or patient, separate analyses were performed for graft and patient survival at three time points. (The analyses were performed using logistic regression, see the *Technical Methods* chapter in the *Executive Summary.*) The analyses also identified donor and recipient characteristics that had a significant impact on survival outcomes. For each *characteristic* (e.g., race, gender) considered in the analyses, a *reference group* was chosen (e.g., White, male) with which the other groups were compared. As a general rule, the largest group or the mean of the characteristic (e.g., mean age for patients who received a single lung transplant was 48 and mean age for patients who received a double lung transplant was 33) is often used as the reference group.

Table II-7. National Donor and Recipient Characteristics in Lung Transplants: Percentages by Era and Overall.

Characteristics by Category		ERA 1 1/88-4/92 N=919	ERA 2 5/92-4/94 N=1216	OVERALL 1/88-4/94 N=2135
Type of Transplant	Single Left Lung Transplant	36.0	32.3	33.9
	Single Right Lung Transplant	35.1	32.2	33.4
	Double Lung Transplant	28.8	35.5	32.6
Donor Age	0-5	1.6	1.5	1.5
	6-10	2.4	2.6	2.5
	11-17	20.2	21.6	21.0
	18-35	55.2	49.1	51.7
	36-49	18.0	20.1	19.2
	50+	2.6	5.0	4.0
Donor Gender	Female	28.7	30.3	29.6
	Male	71.3	69.7	70.4
Donor Race	White	79.1	75.8	77.2
	Black	11.3	15.7	13.8
	Hispanic	8.6	7.2	7.8
	Asian	0.4	0.8	0.7
	Other	0.4	0.3	0.4
	Not Reported	0.1	0.2	0.1
Recipient Age	0-5	1.2	1.2	1.2
	6-10	1.0	1.3	1.2
	11-17	3.6	3.5	3.6
	18-35	22.1	19.5	20.6
	36-49	38.1	28.4	32.6
	50+	34.1	46.1	40.9
Recipient Gender	Female	52.8	53.0	52.9
	Male	47.2	47.0	47.1
Recipient Race	White	90.2	92.0	91.2
	Black	4.1	3.9	4.0
	Hispanic	4.0	1.7	2.7
	Asian	0.5	1.0	0.8
	Other	0.8	1.4	1.1
	Not Reported	0.3	0.0	0.1

		ERA 1	ERA 2	OVERALL
Previous Lung Transplant	No	96.0	97.0	96.6
	Yes	4.0	2.2	3.0
	Not Reported	0.0	0.7	0.4
On Ventilator at Transplant	No	95.5	92.6	93.9
	Yes	3.9	3.6	3.7
	Not Reported	0.5	3.8	2.4
Medical Condition at Transplant	In ICU	7.7	5.8	6.6
	Hospitalized	9.5	7.6	8.4
	Not Hospitalized	82.4	86.2	84.5
	Not Reported	0.4	0.4	0.4
Primary Lung Disease at Transplant	COPD/Emphysema	26.0	38.7	33.3
	Fibrosis (Cystic/Idiopathic)	28.2	25.6	26.7
	Alpha-1-Antitrypsin Deficiency	17.2	12.1	14.3
	Primary Pulmonary Hypertension	12.5	9.5	10.8
	Eisenmenger's Syndrome/Congenital	4.5	4.5	4.5
	Retransplant	0.9	0.5	0.7
	Other	10.4	8.9	9.6
	Not Reported	0.3	0.2	0.2
Year of Transplant	1988	3.6	0.0	1.5
	1989	10.0	0.0	4.3
	1990	22.0	0.0	9.5
	1991	43.6	0.0	18.8
	1992	20.8	28.3	25.1
	1993	0.0	54.3	30.9
	1994	0.0	17.4	9.9
Cold Ischemia Time:				
Single Lung, Left	Up to 2.5 hrs	14.5	18.3	16.6
	> 2.5 - 3 hrs	16.3	13.2	14.6
	> 3 - 3.5 hrs	18.1	11.2	14.4
	> 3.5 - 4.5 hrs	25.7	32.1	29.1
	> 4.5 hrs	23.0	22.9	22.9
	Not Reported	2.4	2.3	2.3

		ERA 1	ERA 2	OVERALL
Single Lung, Right	Up to 2.5 hrs	14.2	14.6	14.4
	> 2.5 - 3 hrs	16.1	11.0	13.3
	> 3 - 3.5 hrs	18.3	14.1	16.0
	> 3.5 - 4.5 hrs	30.0	30.9	30.5
	> 4.5 hrs	18.6	26.9	23.1
	Not Reported	2.8	2.6	2.7
Double Lung, Left	Up to 3.5 hrs	18.1	17.8	17.9
	> 3.5 to 4.5 hrs	20.4	21.1	20.8
	> 4.5 to 5.5 hrs	19.6	23.8	22.2
	> 5.5 to 6.5 hrs	18.1	18.1	18.1
	> 6.5 hrs	19.2	15.5	16.9
	Not Reported	4.5	3.7	4.0
Double Lung, Right	Up to 3.5 hrs	20.8	24.5	23.1
	> 3.5 to 4.5 hrs	24.5	23.1	23.7
	> 4.5 to 5.5 hrs	19.6	20.4	20.1
	> 5.5 to 6.5 hrs	11.7	12.7	12.3
	> 6.5 hrs	13.6	14.6	14.2
	Not Reported	9.8	4.6	6.6

The following served as the characteristics and reference groups for ***short term graft and patient*** survival:

- Donor Race -- White, Hispanic, or Asian
- Donor Gender -- male
- Previous Lung Transplant -- none
- Transplant Type -- single lung transplant
- Mean Recipient Age -- 48 years for single lung transplants and 33 years for double lung transplants.
- Recipient Race -- White or Black
- Recipient Gender -- male
- Lung Disease -- COPD/Emphysema (see Table II-8 for a complete list of disease diagnoses)
- Medical Status -- not hospitalized or in ICU prior to transplant
- Recipient on Ventilator -- no
- Year of Transplant -- 1988 or 1989

The relative impact of each donor and recipient characteristic on short term graft and patient survival outcomes is listed in Table II-9. For each characteristic, the ***odds ratio*** is the odds of patient death (graft failure) as compared to the reference group, after adjusting for the effects of all other donor and recipient characteristics. An *odds ratio of less than 1* indicates that the characteristic was associated with a *reduced odds* of patient death or graft failure relative to the reference group. An odds ratio of *greater than 1* indicates that the characteristic was associated with an *increased odds* of death relative to the reference group. The corresponding p-value measures how significant the odds ratio is. A p-value less than 0.05 indicates statistical significance and means that there is less than a 5% probability that such difference is due to chance alone. The smaller the p-value, the greater the statistical significance and the less likely the difference is due to chance alone.

Examples

In Table II-9, the odds ratio of graft failure at 1 month post-transplant for a recipient on a ventilator at the time of transplant was 4.12. This means that, after adjusting for all of the other donor and recipient characteristics, the odds of graft failure within 1 month was 312% greater for recipients on a ventilator than for those not on a ventilator at the time of transplant ((4.12-1)×100%=312%). As another example, the odds ratio of graft failure within 1

Table II-8. Lung Primary Disease Diagnoses at Time of Transplant

COPD [1] /Emphysema
Primary Pulmonary Hypertension
Cystic/Idiopathic Fibrosis
Alpha-1-Antitrypsin Deficiency (A1A)
Congenital
- Eisenmenger's syndrome
- Other congenital defects
Other
- Inhalation burns/trauma
- Sarcoidosis
- Bronchiectasis
- Rheumatoid disease
- Occupational lung disease
- Lymphangioleiomyomatosis
- Obliterative bronchiolitis
- Pulmonary vascular disease
- Other lung disease

[1] Chronic Obstructive Pulmonary Disease

month post-transplant for a recipient who had a repeat transplant versus a recipient who received a first transplant was 2.71. After adjusting for the effects of both donor and recipient characteristics, the odds of graft failure within 1 month for a patient who had a repeat transplant was 171% higher ((2.71-1)×100%=171%) than that for a patient who received a first transplant.

The estimated odds ratios for continuous variables (i.e., variables with many possible values) such as cold ischemic time and donor and recipient ages, are less easily interpreted. For these variables, the estimated odds is determined for a set unit increase or decrease from the mean (reference group) of the variable. For example, in Table II-9, the estimated odds of 1 year graft failure for single lung recipients age 58 compared to the recipient mean age of 48 is 1.28. This means that, after adjusting for the effects of all other characteristics, the odds of graft failure increased by 28% for the first 10 year increase from the mean age.

Mathematically, this 28% was calculated as follows:

$$\text{Odds ratio} = \exp^{\left[\left(\frac{58-48}{10}\right)\times 0.18+\left(\frac{58-48}{10}\right)^2\times 0.063\right]} = 1.28$$

where (58-48) is the amount of increase in years and 10 years is the unit of increase; 0.18 and 0.063 correspond to the coefficients of age per 10 year difference (See Table II-12 for coefficients). Therefore, the increase in the odds of death or graft failure is (1.28-1)×100%=28%.

Short Term Graft and Patient Survival

The characteristics with the strongest impact on short term graft and patient survival were having a previous lung transplant, being on a ventilator at the time of transplant, and having a congenital or pulmonary hypertension diagnosis. The odds of 1 year graft failure was 174% higher if the transplant was a repeat transplant. Double lung transplants had reduced odds of failure or death by 28% at 1 year. If a ventilator was being used at the time of transplant, then the odds of 1 year graft failure was 324% higher than if a ventilator was not being used at the time of transplant. Nearly 99% of the patients that were on a ventilator were also in the intensive care unit (ICU); and 60% of the patients that were in the ICU were on a ventilator. This might explain why being in the ICU did not turn out to be a significant characteristic in the analysis, because most of its impact had already been explained by the use of a ventilator just prior to transplant. Transplants performed after 1989 have a significantly reduced odds of graft failure and patient death. In particular, transplants performed in 1993 and 1994 had a 59% reduced odds of patient death at 1 year post transplant.

G. LONG TERM SURVIVAL -- IMPACT OF DONOR AND RECIPIENT CHARACTERISTICS

In this report, *long term* survival analyses were developed separately from the short term survival analyses. Because this narrative focuses on conditional 3 year survival (survival at 3 years for grafts or patients surviving at least 1 year post-transplant), only conditional 3 year survival data are presented in this text. Both conditional and unconditional 3 year survival rates are provided in the tables for each transplant program. The conditional 3 year survival analyses provide an assessment of the donor and recipient characteristics that are independent of those limited to the first year (e.g., surgical complications). Due to the small number of transplants used in the long term analysis (n=608), only a few donor and recipient characteristics were identified (Table II-10).

The following characteristics and reference groups were used for ***long term graft and patient*** survival:

- Lung Disease -- non-other group (see Table II-8 for a complete list of disease diagnoses)
- Mean Cold Ischemic Time -- 224 minutes for single lung transplants and 341 minutes for double lung transplants.
- Mean Recipient Age -- 48 years for single lung recipients and 33 years for double lung recipients.
- Recipient Race -- White, Hispanic, or Asian

Graft and Patient Survival

Recipient age, race, and disease diagnoses remain important predictors of survival outcomes. Black had 132% increased odds of patient death and Other (i.e., non-White, non-Hispanic and non-Asian) races had 83% increased odds of patient odds. Medical condition at transplant, donor characteristics, transplant type (single or double lung), whether recipient had a previous transplant, and recipient gender were no longer significant. It is unclear why older recipients and longer cold ischemic times had lower odds ratios. This could be due to the limited number of transplants in the long term analysis. Or perhaps, these factors were associated with a particular characteristic that had a positive impact on long survival but was not taken into account in the analysis.

H. STATISTICAL METHODS AND MODELS

This section provides a brief summary of the statistical methods used to determine survival rates for lung transplants, both nationally and at each transplant program. It is not necessary to read this section in order to utilize the rest of the report. For additional statistical details, please see the Technical Methods chapter in the Executive Summary.

Model Significance -- R^2

The conclusion that there is a "center effect" in lung transplantation often is based on the observation that actual survival rates vary considerably among lung transplant programs. However, in reality, only part of the variability can be attributed to the quality of the program (the so called "center effect"); the rest can be attributed to the differences in donor and recipient characteristics among transplant programs. The degree to which the variability in actual survival rates can be attributed to the specific donor and recipient characteristics in each analysis appears in Table II-11.

In the table, the values in the column labeled R^2 estimate the percentage of variability in the actual survival rates that can be attributed to the covariates in each analysis. *The higher the percentage, the better the analysis explained the individual program outcomes, based on the characteristics examined.* Theoretically, if an analysis contained every covariate that affected survival outcomes, and there were no differences in quality among programs (i.e., no "center effect"), then R^2 would equal 100%. In practice, we can never capture every factor that affects outcomes, and it is likely that real differences among programs do exist. This means that any unexplained variation can probably be attributed to a combination of true center effect and covariates not considered in this study. (For details on the R^2 calculation, refer to the *Model Significance* section in the *Technical Methods* chapter of the *Executive Summary*.)

The value of R^2 estimated from analyses in the 1994 Report was compared to the value of the R^2 analyses in the 1997 Report. Note that these analyses are not *directly* comparable since each was used with a different cohort of transplants. The R^2 calculations for the 1994 and 1997 reports are similar at the 1 month time point; at 1 year the R^2 calculation in the 1997 report is improved by 5%-6% from the 1994 report. Despite the refinements in the 1997 Report, much of the variation in actual survival rates among the 75 transplant programs in the study remains unexplained by the analyses. This suggests that much of the risk involved in transplantation is due to characteristics not described in this report.

Estimated Coefficients and Standard Errors from the Logistic Regression Models

Tables II-12 and II-13 list the coefficients and the standard errors of the coefficients at each time point for all of the characteristics used in the logistic regression models. Each coefficient is reported on the logistic scale and represents the $\log_e$ odds of graft failure or the $\log_e$ odds of patient mortality for the corresponding characteristic at the specified time after transplant. The adjusted odds ratio on the probability scale may be obtained by applying the exponential function to the coefficient. For further details, see the *Odds Ratios* section in the *Technical Methods* chapter of the *Executive Summary*.

Table II-9. Impact of Donor and Recipient Characteristics on Short Term Graft and Patient Survival--Lung Transplants

Short Term Characteristics	Graft Survival				Patient Survival			
	1 Month		1 Year		1 Month		1 Year	
	Odds Ratio	P-value	Odds Ratio	P-value	Odds Ratio	P-value	Odds Ratio	P-value
Donor Black vs White	1.303	0.168	1.329	0.046	1.256	0.259	1.356	0.037
Donor Hispanic, Asian, Other vs White	1.435	0.103	1.426	0.037	1.386	0.158	1.458	0.030
Donor Female vs Male	1.345	0.051	1.268	0.037	1.270	0.134	1.187	0.144
Previous Lung Transplant: Yes vs No	2.711	0.001	2.742	<0.001	3.307	0.002	3.001	0.005
Type of TX: Double vs Single Lung	0.866	0.342	0.718	0.004	0.819	0.210	0.697	0.003
Recipient Age 58 vs 48 for Single Lung, 43 vs 33 for Double Lung [1]	1.103	0.214	1.275	<0.001	1.127	0.147	1.309	<0.001
Recipient Hispanic, Asian, Other vs White, Black	1.329	0.307	1.266	0.294	1.367	0.277	1.355	0.183
Recipient Male vs Female	1.474	0.008	1.304	0.013	1.447	0.015	1.247	0.044
Pulmonary vs COPD/Emphysema	4.272	<0.001	2.039	<0.001	4.712	<0.001	2.192	<0.001
Congenital vs COPD/Emphysema	5.295	<0.001	2.889	<0.001	5.820	<0.001	2.940	<0.001
Fibrosis vs COPD/Emphysema	1.879	0.003	1.942	<0.001	1.908	0.004	1.963	<0.001
A1A vs COPD/Emphysema	1.790	0.013	1.564	0.006	1.903	0.008	1.582	0.006
Other Diagnosis [3] **vs COPD/Emphysema**	2.269	0.001	1.789	0.002	2.273	0.002	1.753	0.004
In Hospital vs Home or in ICU	1.137	0.584	1.503	0.018	1.161	0.541	1.426	0.046
On Ventilator at Transplant: Yes vs No	4.118	<0.001	4.243	<0.001	4.226	<0.001	4.898	<0.001
Transplant Year 1990 vs 1988-1989	0.422	0.003	0.491	0.004	0.432	0.005	0.463	0.003
Transplant Year 1991 vs 1988-1989	0.422	<0.001	0.595	0.017	0.397	<0.001	0.571	0.012
Transplant Year 1992 vs 1988-1989	0.288	<0.001	0.560	0.006	0.290	<0.001	0.564	0.008
Transplant Year 1993-1994 vs 1988-1989	0.266	<0.001	0.422	<0.001	0.257	<0.001	0.408	<0.001

Notes:

[1] The odds ratio for recipient age does not have a linear relationship. The odds ratio presented in this table is a 10 year increment from the mean age. The mean single and double lung recipient ages were 48 and 33, respectively.

[2] See Table II-8 for a listing of lung diagnoses.

Table II-10. Impact of Donor and Recipient Characteristics on Long-Term Graft and Patient Survival -- Lung Transplants

Long Term Characteristics	Graft Survival		Patient Survival	
	Odds Ratio	P-value	Odds Ratio	P-value
Cold Ischemic Time (min) --284 vs 224 for Single Lung and 401 vs 341 for Double Lung [1]	0.965	0.043	0.961	0.029
Recipient Age - 58 vs 48[1]	0.834	0.026	0.871	0.098
Recipient Black vs White	2.777	0.028	2.317	0.075
Recipient Hispanic, Asian, Other vs White	1.914	0.096	1.833	0.129
Other Diagnosis vs Baseline[2]	0.527	0.057	0.593	0.119

Notes:

[1] The odds ratios for recipient age and cold ischemic time do not have a linear relationship. The odds ratios presented in this table are 10 (age) or 15 (cold ischemic time) unit increases from the mean of each characteristic. The mean single lung recipient age was 48; the mean double lung recipient age was 33. The mean single lung cold ischemic time was 224 minutes; the mean double lung cold ischemic time was 341 minutes.

[2] Baseline includes all the disease groups except "Other" listed in Table II-8.

Expected Lung Transplant Survival Rates

Table II-14 shows the 1 year *expected graft* survival rates for lung transplants for a given set of donor and recipient characteristics; Table II-15 shows the 1 year *expected patient* survival rates. These rates were determined using the following characteristics: recipient age, diagnosis, transplant type, and whether or not the recipient was using a ventilator at the time of transplant. For these analyses, all other characteristics were set to the values for the reference groups, with the exception of the year of transplant (1993-1994). The complete list of reference groups is shown on page 19.

For example, in Table II-14, the expected 1 year graft survival for a 50 year old male recipient of a first single lung transplant with pulmonary hypertension was 76% if the patient did not require ventilator prior to transplant. In contrast, the expected 1 year graft survival for the same patient was 43% if he was using a ventilator prior to transplant.

I. SUMMARY

Study Period

The 1997 Report was based on 2,135 lung transplants performed in 2,079 patients between January 1, 1988, and April 30, 1994, from 75 transplant programs in the United States. In order to assess changes within transplant programs over time, the data were divided into 2 eras. The first era included transplants performed from January 1, 1988, through April 30, 1992; the second era covered the two year time period from May 1, 1992, through April 30, 1994.

Survival Rates

Survival rates were computed at 1 month, 1 year, and 3 years, both nationally and for each transplant program. Three year survival was determined in two ways: (1) conditional 3 year survival (i.e., survival at 3 years for those who survived at least 1 year post-transplant), and (2) unconditional 3 year survival. The emphasis on long term survival in this chapter is on the conditional 3-year survival rates because the conditional 3-year analysis provides an assessment of characteristics independent of those limited to the first year (e.g., surgical complications and early acute rejection events).

The national graft and patient survival rates and completeness of follow-up at 1 month, 1 year, and conditional 3 years are shown in Tables II-1 and II-2.

Table II-11. Lung Model R^2: Comparison of the 1994 and 1997 Reports

	Time Point	Report Year	Number of Covariates	R^2
Graft Model R^2	1 Month	1997 1994	20 11	30 30
	1 Year	1997 1994	20 11	36 30
	Cond. 3 Year*	1997 1994	5 NA	16 NA
Patient Model R^2	1 Month	1997 1994	20 11	32 34
	1 Year	1997 1994	20 11	37 32
	Cond. 3 Year*	1997 1994	5 NA	18 NA

* Conditional 3 year analysis was not performed in the 1994 Report.

Table II-12. Model Coefficients and Standard Errors for Donor and Recipient Characteristics in Short Term Lung Transplant Survival

Short Term Characteristics	Graft Survival				Patient Survival			
	1 Month		1 Year		1 Month		1 Year	
	Model Coeff.	Std. Error	Model Coeff.	Std. Error	Model Coeff.	Std. Error	Model Coeff.	Std. Error
Intercept	-1.9361	0.276	-1.0654	0.224	-1.9652	0.288	-1.0617	0.230
Donor Black vs White	0.2644	0.192	0.2845	0.143	0.2276	0.201	0.3048	0.146
Donor Hispanic, Asian, Other vs White	0.3615	0.222	0.3552	0.171	0.3261	0.231	0.3772	0.174
Donor Female vs Male	0.2963	0.152	0.2371	0.113	0.2391	0.159	0.1710	0.117
Previous Lung Transplant: Yes vs No	0.9975	0.310	1.0086	0.296	1.1961	0.394	1.0990	0.389
Type of TX: Double vs Single Lung	-0.1442	0.152	-0.3317	0.116	-0.1993	0.159	-0.3605	0.120
Recipient Age-Linear (per 10 years) [1]	0.1059	0.067	0.1801	0.050	0.1207	0.070	0.2065	0.051
Recipient Age-Quadratic (per 10 years)[1,2]	-0.0076	0.029	0.0626	0.023	-0.0015	0.031	0.0632	0.023
Recipient Hispanic, Asian and Other vs White, Black	0.2841	0.278	0.2356	0.225	0.3129	0.288	0.3039	0.228
Recipient Male vs Female	0.3880	0.146	0.2654	0.107	0.3692	0.152	0.2209	0.110
Pulmonary vs COPD/Emphysema	1.4520	0.241	0.7126	0.189	1.5502	0.250	0.7850	0.193

Short Term Characteristics	Graft Survival				Patient Survival			
	1 Month		1 Year		1 Month		1 Year	
	Model Coeff.	Std. Error	Model Coeff.	Std. Error	Model Coeff.	Std. Error	Model Coeff.	Std. Error
Congenital vs COPD/Emphysema	1.6668	0.302	1.0609	0.251	1.7614	0.310	1.0786	0.256
Fibrosis vs COPD/Emphysema	0.6305	0.216	0.6637	0.152	0.6459	0.227	0.6743	0.156
A1A vs COPD/Emphysema	0.5821	0.233	0.4472	0.164	0.6434	0.243	0.4558	0.168
Other Diagnoses [3] vs COPD/Emphysema	0.8193	0.258	0.5814	0.187	0.8213	0.272	0.5612	0.193
In Hospital vs Home or in ICU	0.1286	0.235	0.4072	0.172	0.1497	0.245	0.3550	0.178
On Ventilator at Transplant: Yes vs No	1.4154	0.280	1.4452	0.269	1.4412	0.301	1.5888	0.290
Transplant Year 1990 vs 1988-1989	-0.8620	0.287	-0.7108	0.247	-0.8395	0.297	-0.7703	0.256
Transplant Year 1991 vs 1988-1989	-0.8638	0.251	-0.5190	0.217	-0.9248	0.262	-0.5605	0.224
Transplant Year 1992 vs 1988-1989	-1.2433	0.251	-0.5805	0.211	-1.2383	0.259	-0.5720	0.216
Transplant Year 1993-1994 vs 1988-1989	-1.3235	0.239	-0.8630	0.205	-1.3577	0.248	-0.8960	0.210

Notes:

[1] In the analysis, the continuous covariates recipient age, was centered about its mean. The mean single and double lung recipient ages were 48 and 33, respectively.

[2] Modeling the continuous covariate, recipient age, with a linear and quadratic term (the square of the linear term) is necessary due to the relationship between the covariate and the odds of graft failure or patient death.

[3] See Table II-8 for a listing of Other lung diagnosis.

Table II-13. Model Coefficients and Standard Errors for Donor and Recipient Characteristics in Long Term Lung Transplant Survival

Long Term Characteristics	Graft Survival		Patient Survival	
	Model Coeff.	Std. Error	Model Coeff.	Std. Error
Intercept	-1.1550	0.170	-1.2077	0.109
Cold Ischemia Time (per 15 minutes) [1]	-0.0359	0.018	-0.0395	0.018
Recipient Age (per 10 years) [1]	-0.1814	0.081	-0.1381	0.083
Recipient Black vs White, Hispanic, Asian	1.0215	0.466	0.8403	0.471
Recipient Other vs White, Hispanic, Asian	0.6493	0.390	0.6061	0.399
Other Diagnosis vs Baseline [2]	-0.6399	0.336	-0.5223	0.335

Notes:

[1] In the analysis, the continuous covariates, recipient age and cold ischemic time, were centered about their mean. The mean single and double lung recipient ages were 48 and 33, respectively. The mean single lung cold ischemic time was 224 minutes; the mean double lung cold ischemic time was 341 minutes.

[2] Baseline includes all the disease groups except "Other" in Table II-8.

Table II-14. Expected U.S. 1 Year Graft Survival Rates -- Lung Transplants Stratified by Recipient Age, Diagnosis, Transplant Type and Ventilator Status

Age	Diagnosis	Single Lung Transplant		Double Lung Transplant	
		No Ventilator	Ventilator	No Ventilator	Ventilator
5	COPD/Emphysema*	NA	NA	NA	NA
	Fibrosis (Cystic/Idiopathic)	70.7	36.3	83.3	54.1
	Alpha-1-Antitrypsin	75.0	41.1	86.1	59.4
	Pulmonary Hypertension	69.7	35.2	82.6	52.9
	Congenital	61.9	27.7	77.1	44.2
	Other	72.4	38.2	84.5	56.1
20	COPD/Emphysema	87.5	62.2	91.6	72.0
	Fibrosis (Cystic/Idiopathic)	78.2	45.8	84.9	56.9
	Alpha-1-Antitrypsin	81.7	51.2	87.4	62.2
	Pulmonary Hypertension	77.4	44.6	84.2	55.7
	Congenital	70.7	36.3	79.0	47.1
	Other	79.6	47.9	85.9	58.9
35	COPD/Emphysema	88.7	64.8	90.2	68.5
	Fibrosis (Cystic/Idiopathic)	80.1	48.7	82.6	52.8
	Alpha-1-Antitrypsin	83.3	54.1	85.5	58.2
	Pulmonary Hypertension	79.3	47.5	81.9	51.6
	Congenital	73.0	39.0	76.1	42.9
	Other	81.4	50.8	83.8	54.9
50	COPD/Emphysema	86.9	60.9	85.5	58.1
	Fibrosis (Cystic/Idiopathic)	77.3	44.5	75.2	41.7
	Alpha-1-Antitrypsin	80.9	49.9	79.0	47.0
	Pulmonary Hypertension	76.4	43.3	74.3	40.5
	Congenital*	NA	NA	NA	NA
	Other	78.7	46.6	76.7	43.7
65	COPD/Emphysema	80.9	49.9	73.9	40.1
	Fibrosis (Cystic/Idiopathic)	68.5	33.9	59.4	25.6
	Alpha-1-Antitrypsin	73.0	38.9	64.5	30.0
	Pulmonary Hypertension	67.5	32.8	58.2	24.7
	Congenital*	NA	NA	NA	NA
	Other	70.3	35.8	61.3	27.2

* - Disease not applicable to age group.

Table II-15. Expected U.S. 1 Year Patient Survival Rates -- Lung Transplants Stratified by Recipient Age, Diagnosis, Transplant Type and Ventilator Status

Age	Diagnosis	Single Lung Transplant		Double Lung Transplant	
		No Ventilator	Ventilator	No Ventilator	Ventilator
5	COPD/Emphysema*	NA	NA	NA	NA
	Fibrosis (Cystic/Idiopathic)	70.7	36.3	83.3	54.1
	Alpha-1-Antitrypsin*	NA	NA	NA	NA
	Pulmonary Hypertension	69.7	35.2	82.6	52.9
	Congenital	61.9	27.7	77.1	44.2
	Other	72.4	38.2	84.5	56.1
20	COPD/Emphysema	87.5	62.2	91.6	72.0
	Fibrosis (Cystic/Idiopathic)	78.2	45.8	84.9	56.9
	Alpha-1-Antitrypsin	81.7	51.2	87.4	62.2
	Pulmonary Hypertension	77.4	44.6	84.2	55.7
	Congenital	70.7	36.3	79.0	47.1
	Other	79.6	47.9	85.9	58.9
35	COPD/Emphysema	88.7	64.8	90.2	68.5
	Fibrosis (Cystic/Idiopathic)	80.1	48.7	82.6	52.8
	Alpha-1-Antitrypsin	83.3	54.7	85.5	58.2
	Pulmonary Hypertension	79.3	47.5	81.9	51.6
	Congenital	73.0	39.0	76.1	42.9
	Other	81.4	50.8	83.8	54.9
50	COPD/Emphysema	86.9	60.9	85.5	58.1
	Fibrosis (Cystic/Idiopathic)	77.3	44.5	75.2	41.7
	Alpha-1-Antitrypsin	80.9	49.9	79.0	47.0
	Pulmonary Hypertension	76.4	43.3	74.3	40.5
	Congenital*	NA	NA	NA	NA
	Other	78.7	46.6	76.7	43.7
65	COPD/Emphysema	80.9	49.9	73.9	40.1
	Fibrosis (Cystic/Idiopathic)	68.5	33.9	59.4	25.6
	Alpha-1-Antitrypsin	73.0	38.9	64.5	30.0
	Pulmonary Hypertension	67.5	32.8	58.2	24.7
	Congenital*	NA	NA	NA	NA
	Other	70.3	35.8	61.3	27.2

* - Disease not applicable to age group.

Table II-16. Comparison of 1 Month and 1 Year Actual Survival Rates Between Eras

	1 Month		1 Year	
	Era 1	Era 2	Era 1	Era 2
Graft Survival (%)	83.5%	89.3%	66.6%	73.4%
Average No. of Transplants/Month	18	51	18	51
Patient Survival (%)	84.5%	90.0%	68.4%	74.5%
Average No. of Patients/Month	17	50	17	50

The percent of programs with graft and patient follow-up data at 1 year was more than 98%; at conditional 3 years the percent of programs with follow-up data was 95%.

There was a marked increase in the number of lung transplants from Era 1 to Era 2. As demonstrated in Table II-16, the number of lung transplants nearly tripled, from an average of 18 transplants per month in Era 1 to an average of 51 per month in Era 2.

For the majority of transplant programs, the difference between actual and expected survival rates was not statistically significant (See Figures II-1 and II-3). In general, large differences (either higher or lower) were nearly always found among programs that reported relatively few transplants (see Figure II-2). Therefore, when evaluating survival rates for a program, it is also important to consider the number of transplants performed there.

Differences Between Short Term and Long Term Characteristics

The 1997 Report includes an extensive list of characteristics that have a significant impact on both short and long term graft and patient survival.

Characteristics with the strongest impact on *short term survival* were:

- Recipient received a previous lung transplant
- Transplant type was double or single lung transplant
- Disease diagnosis
- Recipient on a ventilator at transplant
- Transplant year

Characteristics with the strongest impact on *long term survival* was:

- Recipient race
- Recipient age
- Disease diagnosis

J. FINAL WORDS

The purpose of this report is to provide updated information on survival outcomes both nationally and at specific transplant programs, and to enhance the awareness of program performance in the U.S. However, the assessment of a transplant program should not be based solely on the survival rates provided in this report. Some of the other important factors to consider are the experience of the transplant team, support personnel, the cost of the procedure, and the quality and location of post-transplant services.

III. PROGRAM SPECIFIC DATA

Index of Lung Transplant Programs

Center Code	Provider #	Institution	Page
ALUA	010033	University of Alabama Hospital, Birmingham, AL	1-a
AZUA	030064	University Medical Center, Tucson, AZ	2-a
CACS	050625	Cedars-Sinai Medical Center, Los Angeles, CA	3-a
CASD	050025	UCSD Medical Center, San Diego, CA	4-a
CASF	050454	UCSF Medical Center, San Francisco, CA	5-a
CASH	050100	Sharp Memorial Hospital, San Diego, CA	6-a
CASU	050441 *	Stanford University Medical Center, Palo Alto, CA	7-a
CAUC	050262	UCLA Medical Center, Los Angeles, CA	8-a
CAUH	050696 *	USC University Hospital, Los Angeles, CA	9-a
COSL	060014	Columbia Presbyterian/St. Luke's Medical Center, Denver, CO	10-a
COUC	060024	University Hospital, Denver, CO	11-a
CTYN	070022	Yale New Haven Hospital, New Haven, CT	12-a
FLUF	100113	Shands Hospital, Gainesville, FL	13-a
GAEM	110010	Emory University Hospital, Atlanta, GA	14-a
GAUH	110028	University Hospital, Augusta, GA	15-a
IAIV	160058	University of Iowa Hospitals & Clinics, Iowa City, IA	16-a
IAMH	160083	Mercy Hospital Medical Center, Des Moines, IA	17-a
ILLU	140276	Loyola University Medical Center, Maywood, IL	18-a
ILNM	140281	Northwestern Memorial Hospital, Chicago, IL	19-a
INIM	150056	Methodist Hospital of Indiana, Indianapolis, IN	20-a
INIU	150032	Indiana University Medical Center, Indianapolis, IN	21-a
INLH	150017	The Lutheran Hospital of Ft. Wayne, Fort Wayne, IN	22-a
KYHH	180014 *	Columbia Audubon Hospital, Louisville, KY	23-a
KYJH	180040 *	Jewish Hospital, Louisville, KY	24-a
KYUK	180067	University of Kentucky Medical Center, Lexington, KY	25-a
LAOF	190036	Ochsner Foundation Hospital, New Orleans, LA	26-a
MACH	223302	Children's Hospital, Boston, MA	27-a
MAMG	220071	Massachusetts General Hospital, Boston, MA	28-a
MAPB	220110 *	Brigham & Women's Hospital, Boston, MA	29-a
MDJH	210009 *	John Hopkins Hospital, Baltimore, MD	30-a
MDUM	210002	University of Maryland Medical System, Baltimore, MD	31-a
MIUM	230046	University of Michigan Medical Center, Ann Arbor, MI	32-a
MNAN	240906	Abbott-Northwestern Hospital, Minneapolis, MN	33-a
MNSM	240010 *	St. Mary's Hospital, Rochester,. MN	34-a
MNUM	240049 *	Fairview University Medical Center, Minneapolis, MN	35-a
MOBH	260014	Barnes-Jewish Hospital, St. Louis, MO	36-a
MOCH	263301 *	St. Louis Children's Hospital, St. Louis, MO	37-a
MOSL	260105	St. Louis University Hospital, St. Louis, MO	38-a
MSUM	250001	University of Mississippi Medical Center, Jackson, MS	39-a
NCBG	340047 *	North Carolina Baptist Hospital, Winston-Salem, NC	40-a
NCDU	340030	Duke University Medical Center, Durham, NC	41-a
NCMH	340061	University of North Carolina Hospitals, Chapel Hill, NC	42-a
NEBM	280003	Bryan Memorial Hospital, Lincoln, NE	43-a
NJBI	310002 *	Newark Beth Israel Medical Center, Newark, NJ	44-a
NYCP	330012	The Presbyterian Hospital in NY City, New York, NY	45-a
NYMS	330024	Mount Sinai Medical Center, New York, NY	46-a
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* Transplant program submitted a narrative.

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PACH	393302	Children's Hospital of Pittsburgh, Pittsburgh, PA	51-a
PACP	393303	Children's Hospital of Philadelphia, Philadelphia, PA	52-a
PAPT	390164	University of Pittsburgh Medical Center, Pittsburgh, PA	53-a
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TNBM	440048	Baptist Memorial Hospital, Memphis, TN	57-a
TNVU	440039	Vanderbilt University Medical Center, Nashville, TN	58-a
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WISL	520138	St. Luke's Medical Center, Milwaukee, WI	74-a
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* Transplant program submitted a narrative.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Alabama Hospital - Birmingham AL
Provider Number 010033 (ALUA)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	12	75.0	89.5	23	100.0	93.1	35	35	3	91.4	91.8	-0.4	0.93
1 Year	12	66.7	74.1	23	91.3	78.5	35	35	6	82.9	77.0	5.9	0.39
Cond. [3] 3 Years	8	87.5	79.0				8	8	1	87.5	79.0	8.5	0.55
3 Years [3]		58.3	58.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	12	75.0	89.8	23	100.0	93.5	35	35.0	3.0	91.4	92.2	-0.8	0.85
1 Year	12	66.7	74.8	23	91.3	78.9	35	35.0	6.0	82.9	77.5	5.4	0.43
Cond. [3] 3 Years	8	87.5	79.3				8	8.0	1.0	87.5	79.3	8.2	0.56
3 Years [3]		58.3	59.3										

Notes:

[1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Alabama Hospital - Birmingham AL
Provider Number 010033 (ALUA)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**35**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	10	28.6	724	33.9
	Single Right Lung Tx	21	60.0	714	33.4
	Double Lung Tx	4	11.4	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	10	28.6	449	21.0
	18-35	25	71.4	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	7	20.0	633	29.6
	Male	28	80.0	1502	70.4
Donor Race	White	23	65.7	1649	77.2
	Black	10	28.6	295	13.8
	Hispanic	2	5.7	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	5.7	440	20.6
	36-49	13	37.1	695	32.6
	50+	20	57.1	874	40.9
Recipient Gender	Female	27	77.1	1129	52.9
	Male	8	22.9	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	33	94.3	1948	91.2
	Black	2	5.7	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	35	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	30	85.7	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	5	14.3	51	2.4
Medical Condition at Transplant	Not Hospitalized	31	88.6	1805	84.5
	Hospitalized	2	5.7	180	8.4
	In ICU	2	5.7	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	24	68.6	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	5.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	8.6	305	14.3
	Primary Pulmonary Hypertension	2	5.7	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	4	11.4	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	2.9	92	4.3
	1990	2	5.7	202	9.5
	1991	6	17.1	401	18.8
	1992	9	25.7	535	25.1
	1993	11	31.4	660	30.9
	1994	6	17.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	2	20.0	106	14.6
	> 3.0 - 3.5 hrs	2	20.0	104	14.4
	> 3.5 - 4.0 hrs	3	30.0	211	29.1
	> 4.0 hrs	1	10.0	166	22.9
	Not Reported	2	20.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	9.5	103	14.4
	> 2.5 - 3.0 hrs	2	9.5	95	13.3
	> 3.0 - 3.5 hrs	1	4.8	114	16.0
	> 3.5 - 4.0 hrs	12	57.1	218	30.5
	> 4.0 hrs	2	9.5	165	23.1
	Not Reported	2	9.5	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	25.0	125	17.9
	> 3.5 - 4.5 hrs	1	25.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	1	25.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	25.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	25.0	161	23.1
	> 3.5 - 4.5 hrs	1	25.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	1	25.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	25.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University Medical Center - Tucson AZ
Provider Number 030064 (AZUA)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	8	75.0	83.7	9	88.9	91.5	17	17	3	82.4	87.8	-5.5	0.48
1 Year	8	62.5	68.2	9	77.8	74.5	17	17	5	70.6	71.6	-1.0	0.93
Cond. [3] 3 Years	5	60.0	76.5				5	5	2	60.0	76.5	-16.5	0.60
3 Years [3]		37.5	52.2										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	8	75.0	84.1	9	88.9	91.9	17	17.0	3.0	82.4	88.2	-5.9	0.44
1 Year	8	62.5	69.8	9	77.8	75.4	17	17.0	5.0	70.6	72.8	-2.2	0.83
Cond. [3] 3 Years	5	60.0	77.9				5	5.0	2.0	60.0	77.9	-17.9	0.59
3 Years [3]		37.5	54.4										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University Medical Center - Tucson AZ
Provider Number 030064 (AZUA)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**17**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	10	58.8	724	33.9
	Single Right Lung Tx	6	35.3	714	33.4
	Double Lung Tx	1	5.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	5.9	449	21.0
	18-35	12	70.6	1104	51.7
	36-49	2	11.8	410	19.2
	50+	2	11.8	85	4.0
Donor Gender	Female	5	29.4	633	29.6
	Male	12	70.6	1502	70.4
Donor Race	White	12	70.6	1649	77.2
	Black	1	5.9	295	13.8
	Hispanic	3	17.6	166	7.8
	Asian	0	0.0	14	0.7
	Other	1	5.9	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	11.8	440	20.6
	36-49	6	35.3	695	32.6
	50+	9	52.9	874	40.9
Recipient Gender	Female	6	35.3	1129	52.9
	Male	11	64.7	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	17	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	17	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	17	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	15	88.2	1805	84.5
	Hospitalized	1	5.9	180	8.4
	In ICU	1	5.9	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	7	41.2	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	17.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	4	23.5	305	14.3
	Primary Pulmonary Hypertension	1	5.9	231	10.8
	Eisenmenger's Syndrome/Congenital	1	5.9	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	5.9	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	4	23.5	202	9.5
	1991	4	23.5	401	18.8
	1992	4	23.5	535	25.1
	1993	5	29.4	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	20.0	120	16.6
	> 2.5 - 3.0 hrs	1	10.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	4	40.0	211	29.1
	> 4.0 hrs	3	30.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	2	33.3	95	13.3
	> 3.0 - 3.5 hrs	1	16.7	114	16.0
	> 3.5 - 4.0 hrs	3	50.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	1	100.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	100.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Cedars-Sinai Medical Center - Los Angeles CA
Provider Number 050625 (CACS)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	35	71.4	80.4	11	72.7	88.6	46	46	13	71.7	82.4	-10.6	0.04*
1 Year	35	60.0	64.0	11	63.6	73.2	46	46	18	60.9	66.2	-5.3	0.41
Cond. [3] 3 Years	21	66.7	72.0				21	21	7	66.7	72.0	-5.3	0.57
3 Years [3]		40.0	46.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	35	71.4	81.0	11	72.7	88.7	46	46.0	13.0	71.7	82.9	-11.1	0.03*
1 Year	35	60.0	65.0	11	63.6	73.4	46	46.0	18.0	60.9	67.0	-6.1	0.34
Cond. [3] 3 Years	21	66.7	73.1				21	21.0	7.0	66.7	73.1	-6.4	0.49
3 Years [3]		40.0	47.5										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Cedars-Sinai Medical Center - Los Angeles CA
Provider Number 050625 (CACS)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**46**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	18	39.1	724	33.9
	Single Right Lung Tx	23	50.0	714	33.4
	Double Lung Tx	5	10.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	1	2.2	54	2.5
	11-17	9	19.6	449	21.0
	18-35	28	60.9	1104	51.7
	36-49	7	15.2	410	19.2
	50+	1	2.2	85	4.0
Donor Gender	Female	11	23.9	633	29.6
	Male	35	76.1	1502	70.4
Donor Race	White	24	52.2	1649	77.2
	Black	4	8.7	295	13.8
	Hispanic	18	39.1	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	1	2.2	25	1.2
	11-17	0	0.0	76	3.6
	18-35	8	17.4	440	20.6
	36-49	18	39.1	695	32.6
	50+	19	41.3	874	40.9
Recipient Gender	Female	23	50.0	1129	52.9
	Male	23	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	38	82.6	1948	91.2
	Black	2	4.3	85	4.0
	Hispanic	4	8.7	58	2.7
	Asian	1	2.2	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	1	2.2	3	0.1
Previous Lung Transplant	No	46	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	46	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	42	91.3	1805	84.5
	Hospitalized	2	4.3	180	8.4
	In ICU	2	4.3	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	13	28.3	710	33.3
	Fibrosis (Cystic/Idiopathic)	14	30.4	570	26.7
	Alpha-1-Antitrypsin Deficiency	5	10.9	305	14.3
	Primary Pulmonary Hypertension	7	15.2	231	10.8
	Eisenmenger's Syndrome/Congenital	2	4.3	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	5	10.9	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	2.2	33	1.5
	1989	9	19.6	92	4.3
	1990	12	26.1	202	9.5
	1991	8	17.4	401	18.8
	1992	9	19.6	535	25.1
	1993	5	10.9	660	30.9
	1994	2	4.3	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	5	27.8	120	16.6
	> 2.5 - 3.0 hrs	2	11.1	106	14.6
	> 3.0 - 3.5 hrs	4	22.2	104	14.4
	> 3.5 - 4.0 hrs	4	22.2	211	29.1
	> 4.0 hrs	3	16.7	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	5	21.7	103	14.4
	> 2.5 - 3.0 hrs	8	34.8	95	13.3
	> 3.0 - 3.5 hrs	4	17.4	114	16.0
	> 3.5 - 4.0 hrs	4	17.4	218	30.5
	> 4.0 hrs	2	8.7	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	2	40.0	125	17.9
	> 3.5 - 4.5 hrs	2	40.0	145	20.8
	> 4.5 - 5.5 hrs	1	20.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	20.0	161	23.1
	> 3.5 - 4.5 hrs	3	60.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	1	20.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for UCSD Medical Center - San Diego CA
Provider Number 050025 (CASD)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	23	100.0	88.0	29	89.7	89.2	52	52	3	94.2	88.7	5.6	0.19
1 Year	23	95.7	72.5	29	79.3	74.2	52	52	7	86.5	73.5	13.1	0.03*
Cond. [3] 3 Years	22	76.2	71.8				22	20	5	76.2	71.8	4.4	0.64
3 Years [3]		72.9	52.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	23	100.0	88.8	29	89.7	89.6	52	51.5	3.0	94.2	89.3	4.9	0.23
1 Year	23	95.6	73.3	29	82.6	75.0	52	50.5	6.0	88.3	74.2	14.0	0.02*
Cond. [3] 3 Years	22	76.2	73.3				22	20.0	5.0	76.2	73.3	2.9	0.75
3 Years [3]		72.8	53.7										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

UCSD Medical Center - San Diego CA
Provider Number 050025 (CASD)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**52**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	23	44.2	724	33.9
	Single Right Lung Tx	14	26.9	714	33.4
	Double Lung Tx	15	28.8	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	3	5.8	54	2.5
	11-17	7	13.5	449	21.0
	18-35	34	65.4	1104	51.7
	36-49	7	13.5	410	19.2
	50+	1	1.9	85	4.0
Donor Gender	Female	16	30.8	633	29.6
	Male	36	69.2	1502	70.4
Donor Race	White	38	73.1	1649	77.2
	Black	3	5.8	295	13.8
	Hispanic	11	21.2	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	3	5.8	76	3.6
	18-35	17	32.7	440	20.6
	36-49	11	21.2	695	32.6
	50+	21	40.4	874	40.9
Recipient Gender	Female	31	59.6	1129	52.9
	Male	21	40.4	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	47	90.4	1948	91.2
	Black	2	3.8	85	4.0
	Hispanic	3	5.8	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	52	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	52	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	52	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	17	32.7	710	33.3
	Fibrosis (Cystic/Idiopathic)	18	34.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	5	9.6	305	14.3
	Primary Pulmonary Hypertension	9	17.3	231	10.8
	Eisenmenger's Syndrome/Congenital	2	3.8	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	1.9	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	5.8	202	9.5
	1991	15	28.8	401	18.8
	1992	12	23.1	535	25.1
	1993	17	32.7	660	30.9
	1994	5	9.6	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	5	21.7	120	16.6
	> 2.5 - 3.0 hrs	4	17.4	106	14.6
	> 3.0 - 3.5 hrs	7	30.4	104	14.4
	> 3.5 - 4.0 hrs	6	26.1	211	29.1
	> 4.0 hrs	1	4.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	3	21.4	103	14.4
	> 2.5 - 3.0 hrs	1	7.1	95	13.3
	> 3.0 - 3.5 hrs	5	35.7	114	16.0
	> 3.5 - 4.0 hrs	3	21.4	218	30.5
	> 4.0 hrs	2	14.3	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	6.7	125	17.9
	> 3.5 - 4.5 hrs	6	40.0	145	20.8
	> 4.5 - 5.5 hrs	6	40.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	2	13.3	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	7	46.7	161	23.1
	> 3.5 - 4.5 hrs	6	40.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	1	6.7	86	12.3
	> 6.5 hrs	1	6.7	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for UCSF Medical Center - San Francisco CA
Provider Number 050454 (CASF)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	75.0	85.8	13	92.3	91.2	17	17	2	88.2	89.9	-1.7	0.81
1 Year	4	75.0	69.9	13	69.2	76.9	17	17	5	70.6	75.2	-4.6	0.65
Cond. [3] 3 Years	3	100.0	66.9				3	3	0	100.0	66.9	33.1	0.56
3 Years [3]		75.0	46.8										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	75.0	85.8	13	92.3	91.6	17	17.0	2.0	88.2	90.2	-2.0	0.78
1 Year	4	75.0	69.6	13	69.2	77.7	17	17.0	5.0	70.6	75.8	-5.2	0.61
Cond. [3] 3 Years	3	100.0	68.6				3	3.0	0.0	100.0	68.6	31.4	0.56
3 Years [3]		75.0	47.8										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

UCSF Medical Center - San Francisco CA
Provider Number 050454 (CASF)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**17**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	8	47.1	724	33.9
	Single Right Lung Tx	8	47.1	714	33.4
	Double Lung Tx	1	5.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	4	23.5	449	21.0
	18-35	9	52.9	1104	51.7
	36-49	3	17.6	410	19.2
	50+	1	5.9	85	4.0
Donor Gender	Female	5	29.4	633	29.6
	Male	12	70.6	1502	70.4
Donor Race	White	14	82.4	1649	77.2
	Black	2	11.8	295	13.8
	Hispanic	1	5.9	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	11.8	440	20.6
	36-49	9	52.9	695	32.6
	50+	6	35.3	874	40.9
Recipient Gender	Female	9	52.9	1129	52.9
	Male	8	47.1	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	13	76.5	1948	91.2
	Black	1	5.9	85	4.0
	Hispanic	3	17.6	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	17	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	17	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	17	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	6	35.3	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	11.8	570	26.7
	Alpha-1-Antitrypsin Deficiency	5	29.4	305	14.3
	Primary Pulmonary Hypertension	2	11.8	231	10.8
	Eisenmenger's Syndrome/Congenital	1	5.9	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	5.9	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	1	5.9	401	18.8
	1992	4	23.5	535	25.1
	1993	11	64.7	660	30.9
	1994	1	5.9	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	1	12.5	104	14.4
	> 3.5 - 4.0 hrs	3	37.5	211	29.1
	> 4.0 hrs	4	50.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	25.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	2	25.0	218	30.5
	> 4.0 hrs	4	50.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	1	100.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	1	100.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Sharp Memorial Hospital - San Diego CA
Provider Number 050100 (CASH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	6	100.0	88.2	8	100.0	93.4	14	14	0	100.0	91.2	8.8	0.24
1 Year	6	66.7	69.9	8	74.9	76.6	14	13	4	71.3	73.7	-2.4	0.83
Cond. [3] 3 Years	4	75.0	69.7				4	4	1	75.0	69.7	5.3	1.00
3 Years [3]		50.0	48.7										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	6	100.0	88.8	8	100.0	93.6	14	14.0	0.0	100.0	91.6	8.4	0.25
1 Year	6	66.7	70.8	8	74.9	77.2	14	13.0	4.0	71.3	74.4	-3.1	0.79
Cond. [3] 3 Years	4	75.0	71.1				4	4.0	1.0	75.0	71.1	3.9	1.00
3 Years [3]		50.0	50.3										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Sharp Memorial Hospital - San Diego CA
Provider Number 050100 (CASH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**14**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	3	21.4	724	33.9
	Single Right Lung Tx	11	78.6	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	14.3	449	21.0
	18-35	10	71.4	1104	51.7
	36-49	2	14.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	4	28.6	633	29.6
	Male	10	71.4	1502	70.4
Donor Race	White	9	64.3	1649	77.2
	Black	2	14.3	295	13.8
	Hispanic	1	7.1	166	7.8
	Asian	1	7.1	14	0.7
	Other	1	7.1	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	4	28.6	695	32.6
	50+	10	71.4	874	40.9
Recipient Gender	Female	7	50.0	1129	52.9
	Male	7	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	13	92.9	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	1	7.1	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	14	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	14	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	12	85.7	1805	84.5
	Hospitalized	1	7.1	180	8.4
	In ICU	1	7.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	8	57.1	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	7.1	570	26.7
	Alpha-1-Antitrypsin Deficiency	5	35.7	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	1	7.1	202	9.5
	1991	2	14.3	401	18.8
	1992	5	35.7	535	25.1
	1993	4	28.6	660	30.9
	1994	2	14.3	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	66.7	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	33.3	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	7	63.6	103	14.4
	> 2.5 - 3.0 hrs	1	9.1	95	13.3
	> 3.0 - 3.5 hrs	2	18.2	114	16.0
	> 3.5 - 4.0 hrs	1	9.1	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Stanford University Medical Center - Palo Alto CA
Provider Number 050441 (CASU)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	27	88.5	76.2	13	84.6	88.4	40	39	5	87.2	80.3	6.9	0.23
1 Year	27	61.5	59.0	13	76.9	73.2	40	39	13	66.7	63.7	3.0	0.67
Cond. [3] 3 Years	16	81.3	73.2				16	16	3	81.3	73.2	8.0	0.45
3 Years [3]		50.0	43.2										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	26	90.0	77.0	13	84.6	88.7	39	38.0	4.5	88.2	81.0	7.2	0.21
1 Year	26	64.0	61.1	13	76.9	73.4	39	38.0	12.0	68.4	65.3	3.1	0.66
Cond. [3] 3 Years	16	81.3	74.7				16	16.0	3.0	81.3	74.7	6.5	0.53
3 Years [3]		52.0	45.6										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Stanford University Medical Center - Palo Alto CA
Provider Number 050441 (CASU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**40**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	14	35.0	724	33.9
	Single Right Lung Tx	13	32.5	714	33.4
	Double Lung Tx	13	32.5	697	32.6
Donor Age	0-5	3	7.5	33	1.5
	6-10	0	0.0	54	2.5
	11-17	9	22.5	449	21.0
	18-35	22	55.0	1104	51.7
	36-49	6	15.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	9	22.5	633	29.6
	Male	31	77.5	1502	70.4
Donor Race	White	25	62.5	1649	77.2
	Black	3	7.5	295	13.8
	Hispanic	12	30.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	3	7.5	25	1.2
	6-10	1	2.5	25	1.2
	11-17	2	5.0	76	3.6
	18-35	14	35.0	440	20.6
	36-49	12	30.0	695	32.6
	50+	8	20.0	874	40.9
Recipient Gender	Female	25	62.5	1129	52.9
	Male	15	37.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	34	85.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	1	2.5	58	2.7
	Asian	4	10.0	17	0.8
	Other	1	2.5	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	37	92.5	2062	96.6
	Yes	3	7.5	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	35	87.5	2004	93.9
	Yes	2	5.0	80	3.7
	Not Reported	3	7.5	51	2.4
Medical Condition at Transplant	Not Hospitalized	34	85.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	6	15.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	5	12.5	710	33.3
	Fibrosis (Cystic/Idiopathic)	10	25.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	7.5	305	14.3
	Primary Pulmonary Hypertension	8	20.0	231	10.8
	Eisenmenger's Syndrome/Congenital	4	10.0	96	4.5
	Retransplant	3	7.5	14	0.7
	Other	7	17.5	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	8	20.0	92	4.3
	1990	8	20.0	202	9.5
	1991	8	20.0	401	18.8
	1992	6	15.0	535	25.1
	1993	9	22.5	660	30.9
	1994	1	2.5	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	7.1	120	16.6
	> 2.5 - 3.0 hrs	2	14.3	106	14.6
	> 3.0 - 3.5 hrs	1	7.1	104	14.4
	> 3.5 - 4.0 hrs	4	28.6	211	29.1
	> 4.0 hrs	3	21.4	166	22.9
	Not Reported	3	21.4	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	7.7	103	14.4
	> 2.5 - 3.0 hrs	2	15.4	95	13.3
	> 3.0 - 3.5 hrs	4	30.8	114	16.0
	> 3.5 - 4.0 hrs	2	15.4	218	30.5
	> 4.0 hrs	2	15.4	165	23.1
	Not Reported	2	15.4	19	2.7
Double Lung, Left	Up to 3.5 hrs	3	23.1	125	17.9
	> 3.5 - 4.5 hrs	7	53.8	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	1	7.7	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	2	15.4	28	4.0
Double Lung, Right	Up to 3.5 hrs	4	30.8	161	23.1
	> 3.5 - 4.5 hrs	4	30.8	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	2	15.4	86	12.3
	> 6.5 hrs	1	7.7	99	14.2
	Not Reported	2	15.4	46	6.6

Source: UNOS OPTN/Scientific Registry data.

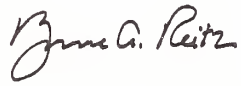
Response From: Stanford University Medical Center
300 Pasteur Drive, Stanford, CA 94305
Provider Number 050441 (CASU)

May 19, 1997

The Heart-Lung and Lung Transplant Program at Stanford Health Services is the longest continually active program in the world. The first successful heart-lung transplant was performed in March of 1981, and since that time, the Stanford program has performed 237 heart-lung or lung transplants. The UNOS survival statistics for our Lung Transplant Program reflect this longstanding commitment to continually improving the outcomes after heart-lung and lung transplantation.

We believe our statistics are a reflection of our experienced team, a multidisciplinary approach to patient care, careful pretransplant evaluation, excellent intraoperative management, and careful post-transplant follow-up. We remain committed to maintaining these standards for those patients requiring these complex therapies.

Bruce A. Reitz, M.D.
Director, Lung Transplant Program



Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for UCLA Medical Center - Los Angeles CA
Provider Number 050262 (CAUC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	75.0	77.1	21	85.7	92.7	25	25	4	84.0	90.2	-6.2	0.28
1 Year	4	75.0	67.4	21	61.9	77.5	25	25	9	64.0	75.9	-11.9	0.15
Cond. [3] 3 Years	3	61.9	63.2				3	2	1	61.9	63.2	-1.3	1.00
3 Years [3]			46.4	42.6									

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	75.0	76.0	21	85.7	93.1	25	25.0	4.0	84.0	90.4	-6.4	0.26
1 Year	4	75.0	66.9	21	61.9	78.1	25	25.0	9.0	64.0	76.3	-12.3	0.14
Cond. [3] 3 Years	3	61.9	66.0				3	2.0	1.0	61.9	66.0	-4.1	1.00
3 Years [3]			46.4	44.2									

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

UCLA Medical Center - Los Angeles CA
Provider Number 050262 (CAUC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**25**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	12	48.0	724	33.9
	Single Right Lung Tx	11	44.0	714	33.4
	Double Lung Tx	2	8.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	7	28.0	449	21.0
	18-35	15	60.0	1104	51.7
	36-49	2	8.0	410	19.2
	50+	1	4.0	85	4.0
Donor Gender	Female	5	20.0	633	29.6
	Male	20	80.0	1502	70.4
Donor Race	White	14	56.0	1649	77.2
	Black	3	12.0	295	13.8
	Hispanic	8	32.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	4	16.0	440	20.6
	36-49	6	24.0	695	32.6
	50+	15	60.0	874	40.9
Recipient Gender	Female	15	60.0	1129	52.9
	Male	10	40.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	21	84.0	1948	91.2
	Black	1	4.0	85	4.0
	Hispanic	2	8.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	1	4.0	3	0.1
Previous Lung Transplant	No	25	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	24	96.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	4.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	24	96.0	1805	84.5
	Hospitalized	1	4.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	14	56.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	12.0	305	14.3
	Primary Pulmonary Hypertension	5	20.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	8.0	204	9.6
	Not Reported	1	4.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	12.0	202	9.5
	1991	0	0.0	401	18.8
	1992	3	12.0	535	25.1
	1993	11	44.0	660	30.9
	1994	8	32.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	4	33.3	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	4	33.3	211	29.1
	> 4.0 hrs	3	25.0	166	22.9
	Not Reported	1	8.3	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	18.2	103	14.4
	> 2.5 - 3.0 hrs	1	9.1	95	13.3
	> 3.0 - 3.5 hrs	4	36.4	114	16.0
	> 3.5 - 4.0 hrs	1	9.1	218	30.5
	> 4.0 hrs	1	9.1	165	23.1
	Not Reported	2	18.2	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	1	50.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	1	50.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	50.0	165	23.7
	> 4.5 - 5.5 hrs	1	50.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for USC - University Hospital - Los Angeles CA
Provider Number 050696 (CAUH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				9	100.0	85.9	9	9	0	100.0	85.9	14.1	0.21
1 Year				9	77.8	72.9	9	9	2	77.8	72.9	4.9	0.74
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				9	100.0	86.3	9	9.0	0.0	100.0	86.3	13.7	0.22
1 Year				9	77.8	73.1	9	9.0	2.0	77.8	73.1	4.7	0.75
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

USC - University Hospital - Los Angeles CA
Provider Number 050696 (CAUH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**9**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	3	33.3	724	33.9
	Single Right Lung Tx	2	22.2	714	33.4
	Double Lung Tx	4	44.4	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	22.2	449	21.0
	18-35	5	55.6	1104	51.7
	36-49	2	22.2	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	1	11.1	633	29.6
	Male	8	88.9	1502	70.4
Donor Race	White	5	55.6	1649	77.2
	Black	2	22.2	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	2	22.2	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	22.2	440	20.6
	36-49	4	44.4	695	32.6
	50+	3	33.3	874	40.9
Recipient Gender	Female	4	44.4	1129	52.9
	Male	5	55.6	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	4	44.4	1948	91.2
	Black	3	33.3	85	4.0
	Hispanic	1	11.1	58	2.7
	Asian	1	11.1	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	9	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	9	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	9	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	11.1	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	11.1	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	4	44.4	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	3	33.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	1	11.1	535	25.1
	1993	6	66.7	660	30.9
	1994	2	22.2	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	33.3	106	14.6
	> 3.0 - 3.5 hrs	1	33.3	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	1	33.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	50.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	50.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	3	75.0	125	17.9
	> 3.5 - 4.5 hrs	1	25.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	3	75.0	161	23.1
	> 3.5 - 4.5 hrs	1	25.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: University of Southern California University Hospital
1510 San Pablo Street, Los Angeles, CA 90033
Provider Number 050696 (CAUH)

May 7, 1997

The pulmonary transplant program began October 31, 1992 at USC University Hospital. During the 2 year time period reflected in this study our center performed 9 pulmonary transplants. We also pioneered the concept of living related lobar transplantation for patients too sick to await a cadaveric organ. Secondary to this procedure, we have a sicker cohort of patients due to the emergent nature of this operation. Even when the statistics on graft survival and patient survival are adjusted for the more complex cases done at USC University Hospital, our results are well above the national expectations, as indicated by the UNOS statistics. Both USC University's 1 month (100 percent) and 1 year (77.8 percent) graft survival rates significantly exceed UNOS' expected survival rates (85.9 percent and 72.9 percent respectively).

USC University's patient survival rates also significantly exceed UNOS' expected survival rates at both 1 month and 1 year. USC University achieved a 100 percent patient survival at 1 month and a 77.8 percent survival at 1 year, while the UNOS expected figures are 86.3 percent at one month and 73.1 at one year.

We believe our excellent statistics are a reflection of our multidisciplinary team approach and our commitment to providing the highest quality of care.

Vaughn A. Starnes, M.D.
Director of Cardiothoracic Transplantation

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Columbia Presbyterian/St Luke's Medical Center - Denver CO
Provider Number 060014 (COSL)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	9	44.4	80.0	1	100.0	82.7	10	10	5	50.0	80.2	-30.2	0.01*
1 Year	9	22.2	61.3	1	0.0	42.3	10	10	8	20.0	59.4	-39.4	<0.01*
Cond. [3] 3 Years	2	100.0	75.9				2	2	0	100.0	75.9	24.1	1.00
3 Years [3]		22.2	46.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	9	44.4	80.8	1	100.0	83.0	10	10.0	5.0	50.0	81.0	-31.0	<0.01*
1 Year	9	22.2	62.3	1	0.0	42.8	10	10.0	8.0	20.0	60.4	-40.4	<0.01*
Cond. [3] 3 Years	2	100.0	76.1				2	2.0	0.0	100.0	76.1	23.9	1.00
3 Years [3]		22.2	47.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Columbia Presbyterian/St Luke's Medical Center - Denver CO
Provider Number 060014 (COSL)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**10**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	5	50.0	724	33.9
	Single Right Lung Tx	4	40.0	714	33.4
	Double Lung Tx	1	10.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	4	40.0	449	21.0
	18-35	5	50.0	1104	51.7
	36-49	1	10.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	4	40.0	633	29.6
	Male	6	60.0	1502	70.4
Donor Race	White	8	80.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	2	20.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	10.0	440	20.6
	36-49	3	30.0	695	32.6
	50+	6	60.0	874	40.9
Recipient Gender	Female	4	40.0	1129	52.9
	Male	6	60.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	9	90.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	1	10.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	10	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	10	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	9	90.0	1805	84.5
	Hospitalized	1	10.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	30.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	6	60.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	10.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	2	20.0	33	1.5
	1989	2	20.0	92	4.3
	1990	2	20.0	202	9.5
	1991	3	30.0	401	18.8
	1992	1	10.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	3	60.0	120	16.6
	> 2.5 - 3.0 hrs	2	40.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	25.0	103	14.4
	> 2.5 - 3.0 hrs	2	50.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	25.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	100.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	100.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University Hospital - Denver CO
Provider Number 060024 (COUC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	3	100.0	87.2	24	91.7	91.1	27	27	2	92.6	90.7	1.9	0.73
1 Year	3	100.0	58.6	24	87.5	74.4	27	27	3	88.9	72.6	16.2	0.05*
Cond. [3] 3 Years	3	100.0	72.1				3	3	0	100.0	72.1	27.9	0.57
3 Years [3]		100.0	42.2										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	3	100.0	87.2	24	91.7	91.6	27	27.0	2.0	92.6	91.1	1.5	0.78
1 Year	3	100.0	58.1	24	87.5	75.1	27	27.0	3.0	88.9	73.2	15.7	0.05
Cond. [3] 3 Years	3	100.0	72.9				3	3.0	0.0	100.0	72.9	27.1	0.57
3 Years [3]		100.0	42.3										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University Hospital - Denver CO
Provider Number 060024 (COUC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**27**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	13	48.1	724	33.9
	Single Right Lung Tx	12	44.4	714	33.4
	Double Lung Tx	2	7.4	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	5	18.5	449	21.0
	18-35	16	59.3	1104	51.7
	36-49	4	14.8	410	19.2
	50+	2	7.4	85	4.0
Donor Gender	Female	6	22.2	633	29.6
	Male	21	77.8	1502	70.4
Donor Race	White	20	74.1	1649	77.2
	Black	3	11.1	295	13.8
	Hispanic	4	14.8	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	4	14.8	440	20.6
	36-49	11	40.7	695	32.6
	50+	12	44.4	874	40.9
Recipient Gender	Female	14	51.9	1129	52.9
	Male	13	48.1	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	23	85.2	1948	91.2
	Black	1	3.7	85	4.0
	Hispanic	3	11.1	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	27	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	27	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	25	92.6	1805	84.5
	Hospitalized	2	7.4	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	8	29.6	710	33.3
	Fibrosis (Cystic/Idiopathic)	11	40.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	5	18.5	305	14.3
	Primary Pulmonary Hypertension	1	3.7	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	7.4	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	9	33.3	535	25.1
	1993	14	51.9	660	30.9
	1994	4	14.8	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	7.7	120	16.6
	> 2.5 - 3.0 hrs	2	15.4	106	14.6
	> 3.0 - 3.5 hrs	3	23.1	104	14.4
	> 3.5 - 4.0 hrs	6	46.2	211	29.1
	> 4.0 hrs	1	7.7	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	3	25.0	95	13.3
	> 3.0 - 3.5 hrs	1	8.3	114	16.0
	> 3.5 - 4.0 hrs	5	41.7	218	30.5
	> 4.0 hrs	3	25.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	1	50.0	118	16.9
	Not Reported	1	50.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	1	50.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	50.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Yale New Haven Hospital - New Haven CT
Provider Number 070022 (CTYN)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	6	50.0	86.8	2	100.0	90.0	8	8	3	62.5	87.6	-25.1	0.03*
1 Year	6	50.0	73.6	2	100.0	73.9	8	8	3	62.5	73.6	-11.1	0.46
Cond. [3] 3 Years	3	66.7	73.3				3	3	1	66.7	73.3	-6.6	1.00
3 Years [3]		33.3	53.9										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	6	50.0	86.9	2	100.0	90.8	8	8.0	3.0	62.5	87.9	-25.4	0.02*
1 Year	6	50.0	74.4	2	100.0	74.7	8	8.0	3.0	62.5	74.5	-12.0	0.42
Cond. [3] 3 Years	3	66.7	74.4				3	3.0	1.0	66.7	74.4	-7.8	1.00
3 Years [3]		33.3	55.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Yale New Haven Hospital - New Haven CT
Provider Number 070022 (CTYN)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**8**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	5	62.5	724	33.9
	Single Right Lung Tx	2	25.0	714	33.4
	Double Lung Tx	1	12.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	37.5	449	21.0
	18-35	5	62.5	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	1	12.5	633	29.6
	Male	7	87.5	1502	70.4
Donor Race	White	7	87.5	1649	77.2
	Black	1	12.5	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	12.5	76	3.6
	18-35	2	25.0	440	20.6
	36-49	3	37.5	695	32.6
	50+	2	25.0	874	40.9
Recipient Gender	Female	5	62.5	1129	52.9
	Male	3	37.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	7	87.5	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	1	12.5	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	8	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	8	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	8	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	25.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	37.5	305	14.3
	Primary Pulmonary Hypertension	2	25.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	12.5	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	2	25.0	202	9.5
	1991	4	50.0	401	18.8
	1992	1	12.5	535	25.1
	1993	1	12.5	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	40.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	3	60.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	50.0	114	16.0
	> 3.5 - 4.0 hrs	1	50.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	100.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	100.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Shands Hospital - Gainesville FL
Provider Number 100113 (FLUF)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				2	100.0	94.4	2	2	0	100.0	94.4	5.6	1.00
1 Year				2	100.0	79.5	2	2	0	100.0	79.5	20.5	1.00
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				2	100.0	94.9	2	2.0	0.0	100.0	94.9	5.1	1.00
1 Year				2	100.0	81.5	2	2.0	0.0	100.0	81.5	18.5	1.00
Cond. [3] 3 Years													
3 Years [3]													

Notes:

[1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Shands Hospital - Gainesville FL
Provider Number 100113 (FLUF)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**2**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	50.0	724	33.9
	Single Right Lung Tx	1	50.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	50.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	1	50.0	85	4.0
Donor Gender	Female	2	100.0	633	29.6
	Male	0	0.0	1502	70.4
Donor Race	White	2	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	50.0	440	20.6
	36-49	1	50.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	2	100.0	1129	52.9
	Male	0	0.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	2	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	2	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	2	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	2	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	50.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	2	100.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	100.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	100.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Emory University Hospital - Atlanta GA
Provider Number 110010 (GAEM)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				7	100.0	87.8	7	7	0	100.0	87.8	12.2	0.31
1 Year				7	100.0	73.9	7	7	0	100.0	73.9	26.1	0.11
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				7	100.0	88.6	7	7.0	0.0	100.0	88.6	11.4	0.33
1 Year				7	100.0	74.7	7	7.0	0.0	100.0	74.7	25.3	0.12
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Emory University Hospital - Atlanta GA
Provider Number 110010 (GAEM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**7**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	57.1	724	33.9
	Single Right Lung Tx	1	14.3	714	33.4
	Double Lung Tx	2	28.6	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	28.6	449	21.0
	18-35	5	71.4	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	28.6	633	29.6
	Male	5	71.4	1502	70.4
Donor Race	White	2	28.6	1649	77.2
	Black	5	71.4	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	28.6	440	20.6
	36-49	3	42.9	695	32.6
	50+	2	28.6	874	40.9
Recipient Gender	Female	2	28.6	1129	52.9
	Male	5	71.4	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	7	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	7	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	5	71.4	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	2	28.6	51	2.4
Medical Condition at Transplant	Not Hospitalized	7	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	28.6	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	28.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	14.3	305	14.3
	Primary Pulmonary Hypertension	2	28.6	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	3	42.9	660	30.9
	1994	4	57.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	3	75.0	120	16.6
	> 2.5 - 3.0 hrs	1	25.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	100.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	1	50.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	50.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	50.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	50.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University Hospital - Augusta GA
Provider Number 110028 (GAUH)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	71.6				1	1	1	0.0	71.6	-71.6	0.28
1 Year	1	0.0	54.0				1	1	1	0.0	54.0	-54.0	0.46
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	71.8				1	1.0	1.0	0.0	71.8	-71.8	0.28
1 Year	1	0.0	56.3				1	1.0	1.0	0.0	56.3	-56.3	0.44
Cond. [3] 3 Years													
3 Years [3]													

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University Hospital - Augusta GA
Provider Number 110028 (GAUH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	0	0.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	1	100.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	1	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	100.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	0	0.0	1805	84.5
	Hospitalized	1	100.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	100.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	100.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	100.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	100.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Iowa Hospitals & Clinics - Iowa City IA
Provider Number 160058 (IAIV)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	9	66.7	78.8	16	68.8	82.3	25	25	8	68.0	81.0	-13.0	0.06
1 Year	9	44.4	64.0	16	50.0	59.6	25	25	13	48.0	61.2	-13.2	0.13
Cond. [3] 3 Years	4	100.0	73.7				4	4	0	100.0	73.7	26.3	0.58
3 Years [3]		44.4	47.2										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	8	75.0	82.4	15	73.3	84.3	23	23.0	6.0	73.9	83.6	-9.7	0.15
1 Year	8	50.0	68.0	15	53.3	60.8	23	23.0	11.0	52.2	63.3	-11.1	0.21
Cond. [3] 3 Years	4	100.0	74.1				4	4.0	0.0	100.0	74.1	25.9	0.58
3 Years [3]		50.0	50.4										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Iowa Hospitals & Clinics - Iowa City IA
Provider Number 160058 (IAIV)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**25**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	3	12.0	724	33.9
	Single Right Lung Tx	1	4.0	714	33.4
	Double Lung Tx	21	84.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	4	16.0	449	21.0
	18-35	14	56.0	1104	51.7
	36-49	4	16.0	410	19.2
	50+	3	12.0	85	4.0
Donor Gender	Female	10	40.0	633	29.6
	Male	15	60.0	1502	70.4
Donor Race	White	23	92.0	1649	77.2
	Black	2	8.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	6	24.0	440	20.6
	36-49	6	24.0	695	32.6
	50+	13	52.0	874	40.9
Recipient Gender	Female	13	52.0	1129	52.9
	Male	12	48.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	25	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	23	92.0	2062	96.6
	Yes	2	8.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	20	80.0	2004	93.9
	Yes	5	20.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	11	44.0	1805	84.5
	Hospitalized	8	32.0	180	8.4
	In ICU	6	24.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	8	32.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	8	32.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	12.0	305	14.3
	Primary Pulmonary Hypertension	5	20.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	4.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	4.0	33	1.5
	1989	2	8.0	92	4.3
	1990	0	0.0	202	9.5
	1991	5	20.0	401	18.8
	1992	6	24.0	535	25.1
	1993	8	32.0	660	30.9
	1994	3	12.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	2	66.7	106	14.6
	> 3.0 - 3.5 hrs	1	33.3	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	100.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	6	28.6	125	17.9
	> 3.5 - 4.5 hrs	6	28.6	145	20.8
	> 4.5 - 5.5 hrs	7	33.3	155	22.2
	> 5.5 - 6.5 hrs	1	4.8	126	18.1
	> 6.5 hrs	1	4.8	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	14	66.7	161	23.1
	> 3.5 - 4.5 hrs	3	14.3	165	23.7
	> 4.5 - 5.5 hrs	3	14.3	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	1	4.8	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Mercy Hospital Medical Center - Des Moines IA
Provider Number 160083 (IAMH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	74.0				1	1	0	100.0	74.0	26.0	1.00
1 Year	1	100.0	56.4				1	1	0	100.0	56.4	43.6	1.00
Cond. [3] 3 Years	1	0.0	64.5				1	1	1	0.0	64.5	-64.5	0.36
3 Years [3]		0.0	36.4										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	74.8				1	1.0	0.0	100.0	74.8	25.2	1.00
1 Year	1	100.0	57.9				1	1.0	0.0	100.0	57.9	42.1	1.00
Cond. [3] 3 Years	1	0.0	65.9				1	1.0	1.0	0.0	65.9	-65.9	0.34
3 Years [3]		0.0	38.2										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Mercy Hospital Medical Center - Des Moines IA
Provider Number 160083 (IAMH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	100.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	1	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	100.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	100.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	100.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	100.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Loyola University Medical Center - Maywood IL
Provider Number 140276 (ILLU)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	24	79.2	85.3	79	87.3	90.0	103	103	15	85.4	88.9	-3.4	0.24
1 Year	24	62.0	69.3	79	68.2	72.7	103	101	34	66.7	71.9	-5.2	0.21
Cond. [3] 3 Years	14	48.3	75.1				14	13	7	48.3	75.1	-26.8	0.02*
3 Years [3]		30.0	52.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	24	77.8	85.5	78	88.2	91.0	99	99.0	14.0	85.9	89.8	-3.9	0.17
1 Year	24	59.5	69.6	78	69.7	74.3	99	97.0	32.0	67.4	73.2	-5.8	0.16
Cond. [3] 3 Years	14	69.0	75.9				14	12.0	4.0	69.0	75.9	-6.9	0.55
3 Years [3]		41.0	52.8										

Notes:

[1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Loyola University Medical Center - Maywood IL
Provider Number 140276 (ILLU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**103**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	25	24.3	724	33.9
	Single Right Lung Tx	37	35.9	714	33.4
	Double Lung Tx	41	39.8	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	25	24.3	449	21.0
	18-35	56	54.4	1104	51.7
	36-49	18	17.5	410	19.2
	50+	4	3.9	85	4.0
Donor Gender	Female	33	32.0	633	29.6
	Male	70	68.0	1502	70.4
Donor Race	White	65	63.1	1649	77.2
	Black	34	33.0	295	13.8
	Hispanic	4	3.9	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	3	2.9	76	3.6
	18-35	24	23.3	440	20.6
	36-49	22	21.4	695	32.6
	50+	54	52.4	874	40.9
Recipient Gender	Female	51	49.5	1129	52.9
	Male	52	50.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	93	90.3	1948	91.2
	Black	5	4.9	85	4.0
	Hispanic	2	1.9	58	2.7
	Asian	2	1.9	17	0.8
	Other	1	1.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	99	96.1	2062	96.6
	Yes	4	3.9	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	100	97.1	2004	93.9
	Yes	3	2.9	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	92	89.3	1805	84.5
	Hospitalized	7	6.8	180	8.4
	In ICU	4	3.9	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	41	39.8	710	33.3
	Fibrosis (Cystic/Idiopathic)	32	31.1	570	26.7
	Alpha-1-Antitrypsin Deficiency	11	10.7	305	14.3
	Primary Pulmonary Hypertension	7	6.8	231	10.8
	Eisenmenger's Syndrome/Congenital	2	1.9	96	4.5
	Retransplant	1	1.0	14	0.7
	Other	9	8.7	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	1.0	33	1.5
	1989	1	1.0	92	4.3
	1990	4	3.9	202	9.5
	1991	9	8.7	401	18.8
	1992	28	27.2	535	25.1
	1993	50	48.5	660	30.9
	1994	10	9.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	3	12.0	120	16.6
	> 2.5 - 3.0 hrs	8	32.0	106	14.6
	> 3.0 - 3.5 hrs	3	12.0	104	14.4
	> 3.5 - 4.0 hrs	6	24.0	211	29.1
	> 4.0 hrs	5	20.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	7	18.9	103	14.4
	> 2.5 - 3.0 hrs	9	24.3	95	13.3
	> 3.0 - 3.5 hrs	7	18.9	114	16.0
	> 3.5 - 4.0 hrs	7	18.9	218	30.5
	> 4.0 hrs	7	18.9	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	5	12.2	125	17.9
	> 3.5 - 4.5 hrs	7	17.1	145	20.8
	> 4.5 - 5.5 hrs	13	31.7	155	22.2
	> 5.5 - 6.5 hrs	10	24.4	126	18.1
	> 6.5 hrs	6	14.6	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	17	41.5	161	23.1
	> 3.5 - 4.5 hrs	16	39.0	165	23.7
	> 4.5 - 5.5 hrs	4	9.8	140	20.1
	> 5.5 - 6.5 hrs	1	2.4	86	12.3
	> 6.5 hrs	3	7.3	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Northwestern Memorial Hospital - Chicago IL
Provider Number 140281 (ILNM)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	69.1				1	1	1	0.0	69.1	-69.1	0.31
1 Year	1	0.0	46.0				1	1	1	0.0	46.0	-46.0	1.00
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	69.2				1	1.0	1.0	0.0	69.2	-69.2	0.31
1 Year	1	0.0	45.9				1	1.0	1.0	0.0	45.9	-45.9	1.00
Cond. [3] 3 Years													
3 Years [3]													

Notes:

[1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Northwestern Memorial Hospital - Chicago IL
Provider Number 140281 (ILNM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	0	0.0	724	33.9
	Single Right Lung Tx	1	100.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	1	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	0	0.0	695	32.6
	50+	1	100.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	100.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	100.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	1	100.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Methodist Hospital of Indiana - Indianapolis IN
Provider Number 150056 (INIM)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	25	100.0	83.7	24	95.8	92.8	49	49	1	98.0	88.1	9.8	0.02*
1 Year	25	96.0	63.4	24	75.0	77.2	49	49	7	85.7	70.1	15.6	0.01*
Cond. [3] 3 Years	24	70.8	73.1				24	24	7	70.8	73.1	-2.3	0.79
3 Years [3]		68.0	46.3										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	25	100.0	84.4	24	95.8	93.1	49	49.0	1.0	98.0	88.7	9.3	0.03*
1 Year	25	96.0	64.5	24	75.0	77.8	49	49.0	7.0	85.7	71.0	14.7	0.01*
Cond. [3] 3 Years	24	70.8	73.8				24	24.0	7.0	70.8	73.8	-3.0	0.72
3 Years [3]		68.0	47.6										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Methodist Hospital of Indiana - Indianapolis IN
Provider Number 150056 (INIM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**49**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	24	49.0	724	33.9
	Single Right Lung Tx	17	34.7	714	33.4
	Double Lung Tx	8	16.3	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	13	26.5	449	21.0
	18-35	26	53.1	1104	51.7
	36-49	9	18.4	410	19.2
	50+	1	2.0	85	4.0
Donor Gender	Female	12	24.5	633	29.6
	Male	37	75.5	1502	70.4
Donor Race	White	40	81.6	1649	77.2
	Black	8	16.3	295	13.8
	Hispanic	1	2.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	7	14.3	440	20.6
	36-49	9	18.4	695	32.6
	50+	33	67.3	874	40.9
Recipient Gender	Female	24	49.0	1129	52.9
	Male	25	51.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	46	93.9	1948	91.2
	Black	3	6.1	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	48	98.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	1	2.0	9	0.4
On Ventilator at Transplant	No	47	95.9	2004	93.9
	Yes	2	4.1	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	38	77.6	1805	84.5
	Hospitalized	9	18.4	180	8.4
	In ICU	2	4.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	25	51.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	15	30.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	4.1	305	14.3
	Primary Pulmonary Hypertension	4	8.2	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	1	2.0	14	0.7
	Other	2	4.1	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	2.0	92	4.3
	1990	4	8.2	202	9.5
	1991	16	32.7	401	18.8
	1992	10	20.4	535	25.1
	1993	15	30.6	660	30.9
	1994	3	6.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	7	29.2	120	16.6
	> 2.5 - 3.0 hrs	3	12.5	106	14.6
	> 3.0 - 3.5 hrs	5	20.8	104	14.4
	> 3.5 - 4.0 hrs	8	33.3	211	29.1
	> 4.0 hrs	1	4.2	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	3	17.6	103	14.4
	> 2.5 - 3.0 hrs	2	11.8	95	13.3
	> 3.0 - 3.5 hrs	5	29.4	114	16.0
	> 3.5 - 4.0 hrs	7	41.2	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	4	50.0	125	17.9
	> 3.5 - 4.5 hrs	1	12.5	145	20.8
	> 4.5 - 5.5 hrs	2	25.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	12.5	28	4.0
Double Lung, Right	Up to 3.5 hrs	3	37.5	161	23.1
	> 3.5 - 4.5 hrs	3	37.5	165	23.7
	> 4.5 - 5.5 hrs	1	12.5	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	12.5	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Indiana University Medical Center - Indianapolis IN
Provider Number 150032 (INIU)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	80.0	89.6	6	100.0	90.2	11	11	1	90.9	90.0	0.9	0.92
1 Year	5	60.0	69.3	6	83.3	71.3	11	11	3	72.7	70.4	2.3	0.86
Cond. [3] 3 Years	3	66.7	79.0				3	3	1	66.7	79.0	-12.3	1.00
3 Years [3]		40.0	54.8										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/83-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	80.0	90.4	6	100.0	90.7	11	11.0	1.0	90.9	90.6	0.3	0.97
1 Year	5	60.0	70.5	6	83.3	71.9	11	11.0	3.0	72.7	71.3	1.5	0.91
Cond. [3] 3 Years	3	66.7	79.6				3	3.0	1.0	66.7	79.6	-12.9	0.50
3 Years [3]		40.0	56.1										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Indiana University Medical Center - Indianapolis IN
Provider Number 150032 (INIU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**11**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	36.4	724	33.9
	Single Right Lung Tx	2	18.2	714	33.4
	Double Lung Tx	5	45.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	27.3	449	21.0
	18-35	7	63.6	1104	51.7
	36-49	1	9.1	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	18.2	633	29.6
	Male	9	81.8	1502	70.4
Donor Race	White	9	81.8	1649	77.2
	Black	1	9.1	295	13.8
	Hispanic	1	9.1	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	9.1	440	20.6
	36-49	4	36.4	695	32.6
	50+	6	54.5	874	40.9
Recipient Gender	Female	5	45.5	1129	52.9
	Male	6	54.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	11	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	11	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	11	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	9	81.8	1805	84.5
	Hospitalized	2	18.2	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	5	45.5	710	33.3
	Fibrosis (Cystic/Idiopathic)	4	36.4	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	9.1	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	9.1	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	4	36.4	401	18.8
	1992	3	27.3	535	25.1
	1993	3	27.3	660	30.9
	1994	1	9.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	3	75.0	211	29.1
	> 4.0 hrs	1	25.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	50.0	218	30.5
	> 4.0 hrs	1	50.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	3	60.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	1	20.0	126	18.1
	> 6.5 hrs	1	20.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	2	40.0	86	12.3
	> 6.5 hrs	3	60.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for The Lutheran Hospital of Ft. Wayne - Fort Wayne IN
Provider Number 150017 (INLH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	7	57.1	84.9	6	66.7	90.6	13	13	5	61.5	87.5	-26.0	<0.01*
1 Year	7	28.6	68.8	6	50.0	74.9	13	13	8	38.5	71.6	-33.1	<0.01*
Cond. [3] 3 Years	2	50.0	77.2				2	2	1	50.0	77.2	-27.2	0.40
3 Years [3]		14.3	53.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	7	57.1	85.3	6	66.7	90.9	13	13.0	5.0	61.5	87.9	-26.3	<0.01*
1 Year	7	28.6	69.7	6	50.0	75.7	13	13.0	8.0	38.5	72.5	-34.0	<0.01*
Cond. [3] 3 Years	2	50.0	77.1				2	2.0	1.0	50.0	77.1	-27.1	0.40
3 Years [3]		14.3	53.7										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

The Lutheran Hospital of Ft. Wayne - Fort Wayne IN
Provider Number 150017 (INLH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**13**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	7	53.8	724	33.9
	Single Right Lung Tx	5	38.5	714	33.4
	Double Lung Tx	1	7.7	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	23.1	449	21.0
	18-35	9	69.2	1104	51.7
	36-49	1	7.7	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	15.4	633	29.6
	Male	11	84.6	1502	70.4
Donor Race	White	11	84.6	1649	77.2
	Black	2	15.4	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	15.4	440	20.6
	36-49	5	38.5	695	32.6
	50+	6	46.2	874	40.9
Recipient Gender	Female	4	30.8	1129	52.9
	Male	9	69.2	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	11	84.6	1948	91.2
	Black	1	7.7	85	4.0
	Hispanic	1	7.7	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	13	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	12	92.3	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	7.7	51	2.4
Medical Condition at Transplant	Not Hospitalized	13	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	5	38.5	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	23.1	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	15.4	305	14.3
	Primary Pulmonary Hypertension	1	7.7	231	10.8
	Eisenmenger's Syndrome/Congenital	1	7.7	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	7.7	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	7.7	92	4.3
	1990	1	7.7	202	9.5
	1991	3	23.1	401	18.8
	1992	2	15.4	535	25.1
	1993	5	38.5	660	30.9
	1994	1	7.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	14.3	120	16.6
	> 2.5 - 3.0 hrs	1	14.3	106	14.6
	> 3.0 - 3.5 hrs	1	14.3	104	14.4
	> 3.5 - 4.0 hrs	3	42.9	211	29.1
	> 4.0 hrs	1	14.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	20.0	103	14.4
	> 2.5 - 3.0 hrs	1	20.0	95	13.3
	> 3.0 - 3.5 hrs	1	20.0	114	16.0
	> 3.5 - 4.0 hrs	2	40.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	100.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	100.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Columbia Audubon Hospital - Louisville KY
Provider Number 180014 (KYHH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	65.1				1	1	0	100.0	65.1	34.9	1.00
1 Year	1	100.0	47.2				1	1	0	100.0	47.2	52.8	0.47
Cond. [3] 3 Years	1	100.0	64.1				1	1	0	100.0	64.1	35.9	1.00
3 Years [3]		100.0	30.2										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	65.2				1	1.0	0.0	100.0	65.2	34.8	1.00
1 Year	1	100.0	46.2				1	1.0	0.0	100.0	46.2	53.8	0.46
Cond. [3] 3 Years	1	100.0	66.3				1	1.0	0.0	100.0	66.3	33.7	1.00
3 Years [3]		100.0	30.6										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Columbia Audubon Hospital - Louisville KY
Provider Number 180014 (KYHH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	100.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	1	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	100.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	0	0.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	1	100.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	100.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	100.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	100.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Columbia Audubon Hospital
One Audubon Plaza Drive, Louisville, KY 40217
Provider Number 180014 (KYHH)

June 4, 1997

Audubon Regional Medical Center's lung transplant program began in 1988 and performed 1 single lung transplant in April, 1989. The patient did well for two years, but developed CMV pneumonia and expired two years and nine months after transplant.

Roland Girardet, M.D.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Jewish Hospital - Louisville KY
Provider Number 180040 (KYJH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	78.5	4	100.0	91.4	5	5	0	100.0	88.8	11.2	1.00
1 Year	1	100.0	67.7	4	100.0	71.9	5	5	0	100.0	71.1	28.9	0.33
Cond. [3] 3 Years	1	100.0	62.9				1	1	0	100.0	62.9	37.1	1.00
3 Years [3]		100.0	42.6										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	79.4	4	100.0	91.9	5	5.0	0.0	100.0	89.4	10.6	1.00
1 Year	1	100.0	69.5	4	100.0	74.6	5	5.0	0.0	100.0	73.6	26.4	0.33
Cond. [3] 3 Years	1	100.0	65.5				1	1.0	0.0	100.0	65.5	34.5	1.00
3 Years [3]		100.0	45.6										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Jewish Hospital - Louisville KY
Provider Number 180040 (KYJH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**5**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	3	60.0	724	33.9
	Single Right Lung Tx	2	40.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	40.0	449	21.0
	18-35	1	20.0	1104	51.7
	36-49	1	20.0	410	19.2
	50+	1	20.0	85	4.0
Donor Gender	Female	2	40.0	633	29.6
	Male	3	60.0	1502	70.4
Donor Race	White	5	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	40.0	440	20.6
	36-49	2	40.0	695	32.6
	50+	1	20.0	874	40.9
Recipient Gender	Female	1	20.0	1129	52.9
	Male	4	80.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	5	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	5	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	4	80.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	20.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	20.0	1805	84.5
	Hospitalized	3	60.0	180	8.4
	In ICU	1	20.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	40.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	20.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	20.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	20.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	1	20.0	401	18.8
	1992	0	0.0	535	25.1
	1993	1	20.0	660	30.9
	1994	3	60.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	33.3	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	2	66.7	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	50.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	50.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Jewish Hospital
217 East Chestnut Street, Louisville, KY 40202
Provider Number 180040 (KYJH)

May 8, 1997

Jewish Hospital The Transplant Center and the University of Louisville School of Medicine are pleased that the UNOS survival statistics for our lung transplant program reflect our long-standing commitment to high-quality patient care, especially among complex, high-risk patients. While no purely statistical analysis such as this one should ever be used as the sole measure of a transplant program=s quality, the UNOS data are one measure of the success of our lung transplant program.

We believe our excellent statistics are a reflection of our multi-disciplinary approach, with careful pre-transplant, preparative, and post-transplant follow-up, and close cooperation among medical, surgical, and other specialists.

Robert D. Dowling, M.D.
Co-Director, Lung Transplant Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Kentucky Medical Center - Lexington KY
Provider Number 180067 (KYUK)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	84.8	24	91.7	88.8	25	25	2	92.0	88.6	3.4	0.58
1 Year	1	0.0	70.2	24	83.3	74.8	25	25	5	80.0	74.7	5.3	0.52
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	84.6	24	91.7	89.0	25	25.0	2.0	92.0	88.8	3.2	0.60
1 Year	1	0.0	71.0	24	83.3	75.4	25	25.0	5.0	80.0	75.2	4.8	0.56
Cond. [3] 3 Years													
3 Years [3]													

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Kentucky Medical Center - Lexington KY
Provider Number 180067 (KYUK)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**25**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	20	80.0	724	33.9
	Single Right Lung Tx	5	20.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	12.0	449	21.0
	18-35	11	44.0	1104	51.7
	36-49	4	16.0	410	19.2
	50+	7	28.0	85	4.0
Donor Gender	Female	10	40.0	633	29.6
	Male	15	60.0	1502	70.4
Donor Race	White	24	96.0	1649	77.2
	Black	1	4.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	6	24.0	440	20.6
	36-49	8	32.0	695	32.6
	50+	11	44.0	874	40.9
Recipient Gender	Female	17	68.0	1129	52.9
	Male	8	32.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	23	92.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	1	4.0	17	0.8
	Other	1	4.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	25	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	24	96.0	2004	93.9
	Yes	1	4.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	21	84.0	1805	84.5
	Hospitalized	1	4.0	180	8.4
	In ICU	3	12.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	11	44.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	4.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	8.0	305	14.3
	Primary Pulmonary Hypertension	8	32.0	231	10.8
	Eisenmenger's Syndrome/Congenital	2	8.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	4.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	1	4.0	401	18.8
	1992	5	20.0	535	25.1
	1993	12	48.0	660	30.9
	1994	7	28.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	10	50.0	120	16.6
	> 2.5 - 3.0 hrs	2	10.0	106	14.6
	> 3.0 - 3.5 hrs	6	30.0	104	14.4
	> 3.5 - 4.0 hrs	2	10.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	40.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	2	40.0	114	16.0
	> 3.5 - 4.0 hrs	1	20.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Ochsner Foundation Hospital - New Orleans LA
Provider Number 190036 (LAOF)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	60.0	82.0	11	100.0	90.2	16	15	2	86.7	87.5	-0.8	0.92
1 Year	5	40.0	66.5	11	80.0	74.2	16	15	5	66.7	71.7	-5.0	0.65
Cond. [3] 3 Years	2	50.0	60.8				2	2	1	50.0	60.8	-10.8	1.00
3 Years [3]		20.0	40.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	60.0	83.1	11	100.0	90.7	16	15.0	2.0	86.7	88.2	-1.5	0.85
1 Year	5	40.0	68.3	11	80.0	74.9	16	15.0	5.0	66.7	72.7	-6.0	0.58
Cond. [3] 3 Years	2	50.0	64.8				2	2.0	1.0	50.0	64.8	-14.8	1.00
3 Years [3]		20.0	44.3										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Ochsner Foundation Hospital - New Orleans LA
Provider Number 190036 (LAOF)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**16**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	25.0	724	33.9
	Single Right Lung Tx	6	37.5	714	33.4
	Double Lung Tx	6	37.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	1	6.3	54	2.5
	11-17	4	25.0	449	21.0
	18-35	9	56.3	1104	51.7
	36-49	2	12.5	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	7	43.8	633	29.6
	Male	9	56.3	1502	70.4
Donor Race	White	14	87.5	1649	77.2
	Black	2	12.5	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	1	6.3	25	1.2
	11-17	1	6.3	76	3.6
	18-35	5	31.3	440	20.6
	36-49	4	25.0	695	32.6
	50+	5	31.3	874	40.9
Recipient Gender	Female	10	62.5	1129	52.9
	Male	6	37.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	13	81.3	1948	91.2
	Black	3	18.8	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	16	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	13	81.3	2004	93.9
	Yes	1	6.3	80	3.7
	Not Reported	2	12.5	51	2.4
Medical Condition at Transplant	Not Hospitalized	14	87.5	1805	84.5
	Hospitalized	1	6.3	180	8.4
	In ICU	1	6.3	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	18.8	710	33.3
	Fibrosis (Cystic/Idiopathic)	8	50.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	3	18.8	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	12.5	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	2	12.5	401	18.8
	1992	5	31.3	535	25.1
	1993	5	31.3	660	30.9
	1994	4	25.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	25.0	106	14.6
	> 3.0 - 3.5 hrs	2	50.0	104	14.4
	> 3.5 - 4.0 hrs	1	25.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	33.3	103	14.4
	> 2.5 - 3.0 hrs	2	33.3	95	13.3
	> 3.0 - 3.5 hrs	1	16.7	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	1	16.7	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	4	66.7	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	2	33.3	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	16.7	161	23.1
	> 3.5 - 4.5 hrs	3	50.0	165	23.7
	> 4.5 - 5.5 hrs	2	33.3	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Children's Hospital - Boston MA
Provider Number 223302 (MACH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	50.0	87.3	7	71.4	91.8	11	11	4	63.6	90.1	-26.5	<0.01*
1 Year	4	50.0	62.9	7	42.9	75.3	11	11	6	45.5	70.8	-25.3	0.05
Cond. [3] 3 Years	2	49.9	67.0				2	1	1	49.9	67.0	-17.0	1.00
3 Years [3]		25.0	42.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	50.0	88.2	7	71.4	92.8	11	11.0	4.0	63.6	91.1	-27.5	<0.01*
1 Year	4	50.0	66.9	7	42.9	77.8	11	11.0	6.0	45.5	73.8	-28.4	0.03*
Cond. [3] 3 Years	2	49.9	69.8				2	1.0	1.0	49.9	69.8	-19.9	1.00
3 Years [3]		25.0	46.7										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Children's Hospital - Boston MA
Provider Number 223302 (MACH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**11**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	9.1	724	33.9
	Single Right Lung Tx	2	18.2	714	33.4
	Double Lung Tx	8	72.7	697	32.6
Donor Age	0-5	3	27.3	33	1.5
	6-10	2	18.2	54	2.5
	11-17	2	18.2	449	21.0
	18-35	2	18.2	1104	51.7
	36-49	2	18.2	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	7	63.6	633	29.6
	Male	4	36.4	1502	70.4
Donor Race	White	8	72.7	1649	77.2
	Black	2	18.2	295	13.8
	Hispanic	1	9.1	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	2	18.2	25	1.2
	6-10	1	9.1	25	1.2
	11-17	4	36.4	76	3.6
	18-35	4	36.4	440	20.6
	36-49	0	0.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	5	45.5	1129	52.9
	Male	6	54.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	9	81.8	1948	91.2
	Black	1	9.1	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	1	9.1	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	11	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	11	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	8	72.7	1805	84.5
	Hospitalized	2	18.2	180	8.4
	In ICU	1	9.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	7	63.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	9.1	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	3	27.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	1	9.1	202	9.5
	1991	1	9.1	401	18.8
	1992	4	36.4	535	25.1
	1993	4	36.4	660	30.9
	1994	1	9.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	100.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	2	100.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	7	87.5	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	12.5	28	4.0
Double Lung, Right	Up to 3.5 hrs	2	25.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	4	50.0	140	20.1
	> 5.5 - 6.5 hrs	1	12.5	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	12.5	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Massachusetts General Hospital - Boston MA
Provider Number 220071 (MAMG)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	14	92.9	88.6	14	100.0	92.2	28	28	1	96.4	90.4	6.1	0.27
1 Year	14	71.4	73.0	14	100.0	76.5	28	28	4	85.7	74.7	11.0	0.17
Cond. [3] 3 Years	10	90.0	75.3				10	10	1	90.0	75.3	14.7	0.27
3 Years [3]		64.3	55.0										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	14	92.9	89.3	14	100.0	92.4	28	28.0	1.0	96.4	90.9	5.6	0.29
1 Year	14	71.4	74.5	14	100.0	76.9	28	28.0	4.0	85.7	75.7	10.0	0.21
Cond. [3] 3 Years	10	90.0	76.5				10	10.0	1.0	90.0	76.5	13.5	0.30
3 Years [3]		64.3	57.0										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Massachusetts General Hospital - Boston MA
Provider Number 220071 (MAMG)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**28**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	7	25.0	724	33.9
	Single Right Lung Tx	15	53.6	714	33.4
	Double Lung Tx	6	21.4	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	4	14.3	449	21.0
	18-35	16	57.1	1104	51.7
	36-49	7	25.0	410	19.2
	50+	1	3.6	85	4.0
Donor Gender	Female	5	17.9	633	29.6
	Male	23	82.1	1502	70.4
Donor Race	White	25	89.3	1649	77.2
	Black	2	7.1	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	1	3.6	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	4	14.3	440	20.6
	36-49	12	42.9	695	32.6
	50+	12	42.9	874	40.9
Recipient Gender	Female	18	64.3	1129	52.9
	Male	10	35.7	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	25	89.3	1948	91.2
	Black	1	3.6	85	4.0
	Hispanic	1	3.6	58	2.7
	Asian	1	3.6	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	28	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	28	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	23	82.1	1805	84.5
	Hospitalized	4	14.3	180	8.4
	In ICU	1	3.6	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	11	39.3	710	33.3
	Fibrosis (Cystic/Idiopathic)	9	32.1	570	26.7
	Alpha-1-Antitrypsin Deficiency	5	17.9	305	14.3
	Primary Pulmonary Hypertension	1	3.6	231	10.8
	Eisenmenger's Syndrome/Congenital	1	3.6	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	3.6	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	10.7	202	9.5
	1991	11	39.3	401	18.8
	1992	7	25.0	535	25.1
	1993	6	21.4	660	30.9
	1994	1	3.6	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	14.3	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	14.3	211	29.1
	> 4.0 hrs	4	57.1	166	22.9
	Not Reported	1	14.3	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	3	20.0	95	13.3
	> 3.0 - 3.5 hrs	2	13.3	114	16.0
	> 3.5 - 4.0 hrs	5	33.3	218	30.5
	> 4.0 hrs	3	20.0	165	23.1
	Not Reported	2	13.3	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	1	16.7	145	20.8
	> 4.5 - 5.5 hrs	1	16.7	155	22.2
	> 5.5 - 6.5 hrs	2	33.3	126	18.1
	> 6.5 hrs	2	33.3	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	2	33.3	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	2	33.3	86	12.3
	> 6.5 hrs	1	16.7	99	14.2
	Not Reported	1	16.7	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Brigham & Women's Hospital - Boston MA
Provider Number 220110 (MAPB)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	17	76.5	85.3	24	91.6	92.1	41	40	6	85.3	89.3	-4.0	0.38
1 Year	17	70.6	70.3	24	56.7	77.0	41	40	15	62.6	74.2	-11.6	0.08
Cond. [3] 3 Years	12	62.3	72.5				12	9	4	62.3	72.5	-10.1	0.45
3 Years [3]		44.0	50.9										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	16	81.3	87.4	24	91.6	92.6	40	39.0	5.0	87.4	90.5	-3.1	0.49
1 Year	16	75.0	73.4	24	56.7	77.9	40	39.0	14.0	64.2	76.1	-11.9	0.07
Cond. [3] 3 Years	12	62.3	73.8				12	9.0	4.0	62.3	73.8	-11.5	0.38
3 Years [3]		46.8	54.2										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Brigham & Women's Hospital - Boston MA
Provider Number 220110 (MAPB)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**41**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	12	29.3	724	33.9
	Single Right Lung Tx	20	48.8	714	33.4
	Double Lung Tx	9	22.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	11	26.8	449	21.0
	18-35	21	51.2	1104	51.7
	36-49	5	12.2	410	19.2
	50+	4	9.8	85	4.0
Donor Gender	Female	11	26.8	633	29.6
	Male	30	73.2	1502	70.4
Donor Race	White	36	87.8	1649	77.2
	Black	1	2.4	295	13.8
	Hispanic	4	9.8	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	9	22.0	440	20.6
	36-49	13	31.7	695	32.6
	50+	19	46.3	874	40.9
Recipient Gender	Female	18	43.9	1129	52.9
	Male	23	56.1	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	39	95.1	1948	91.2
	Black	2	4.9	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	39	95.1	2062	96.6
	Yes	1	2.4	64	3.0
	Not Reported	1	2.4	9	0.4
On Ventilator at Transplant	No	37	90.2	2004	93.9
	Yes	1	2.4	80	3.7
	Not Reported	3	7.3	51	2.4
Medical Condition at Transplant	Not Hospitalized	34	82.9	1805	84.5
	Hospitalized	3	7.3	180	8.4
	In ICU	4	9.8	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	17	41.5	710	33.3
	Fibrosis (Cystic/Idiopathic)	12	29.3	570	26.7
	Alpha-1-Antitrypsin Deficiency	4	9.8	305	14.3
	Primary Pulmonary Hypertension	2	4.9	231	10.8
	Eisenmenger's Syndrome/Congenital	1	2.4	96	4.5
	Retransplant	1	2.4	14	0.7
	Other	2	4.9	204	9.6
	Not Reported	2	4.9	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	6	14.6	202	9.5
	1991	8	19.5	401	18.8
	1992	12	29.3	535	25.1
	1993	12	29.3	660	30.9
	1994	3	7.3	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	16.7	120	16.6
	> 2.5 - 3.0 hrs	4	33.3	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	5	41.7	211	29.1
	> 4.0 hrs	1	8.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	10.0	103	14.4
	> 2.5 - 3.0 hrs	4	20.0	95	13.3
	> 3.0 - 3.5 hrs	3	15.0	114	16.0
	> 3.5 - 4.0 hrs	9	45.0	218	30.5
	> 4.0 hrs	2	10.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	3	33.3	125	17.9
	> 3.5 - 4.5 hrs	4	44.4	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	1	11.1	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	11.1	28	4.0
Double Lung, Right	Up to 3.5 hrs	4	44.4	161	23.1
	> 3.5 - 4.5 hrs	2	22.2	165	23.7
	> 4.5 - 5.5 hrs	2	22.2	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	11.1	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Brigham & Women's Hospital
75 Francis Street, Boston, MA 02115
Provider Number 220110 (MAPB)

May 17, 1997

The Brigham & Women's Hospital Lung Transplant Program was established in July 1990. The program involves a multidisciplinary team dedicated to the care of patients with end stage lung disease. Lung transplantation is an important resource for our patients and continues to be a source of innovation in lung research. Because of the chronic shortage of donor organs, the BWH team has worked closely with the New England Organ Bank to increase lung donation in our region. In addition, the BWH team has developed programs designed to complement transplantation and provide therapeutic alternatives to patients with end stage lung disease. An example of this approach is the emphysema initiative at the BWH which includes participation in the National Institutes of Health trial of lung volume reduction surgery for emphysema.

The survival results reported here are comparable to those of other leading centers of lung transplantation. We recognize the limitations of small numbers of patients and the disproportionate influence of low frequency events. A more comprehensive view of our program would reflect not only expertise in clinical lung transplantation, but advanced research in lung diseases. This integrated effort at the BWH has benefited numerous patients and led to innovations in the understanding and treatment of lung diseases.

The Brigham & Women's Hospital met stringent criteria to become a member of UNOS and obtain Medicare certification. We are proud of our transplant program and will continue our commitment to provide the **finest** patient care found anywhere.

Steven J. Mentzer, M.D.
Director, Lung Transplant Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Johns Hopkins Hospital - Baltimore MD
Provider Number 210009 (MDJH)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				1	100.0	92.4	1	1	0	100.0	92.4	7.6	1.00
1 Year				1	0.0	74.6	1	1	1	0.0	74.6	-74.6	0.25
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				1	100.0	93.0	1	1.0	0.0	100.0	93.0	7.0	1.00
1 Year				1	0.0	75.0	1	1.0	1.0	0.0	75.0	-75.0	0.25
Cond. [3] 3 Years													
3 Years [3]													

Notes:

[1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Johns Hopkins Hospital - Baltimore MD
Provider Number 210009 (MDJH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	0	0.0	724	33.9
	Single Right Lung Tx	1	100.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	0	0.0	1649	77.2
	Black	1	100.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	0	0.0	695	32.6
	50+	1	100.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	100.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	1	100.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	1	100.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Johns Hopkins Hospital
600 N. Wolfe Street, Baltimore, MD 21287
Provider Number 210009 (MDJH)

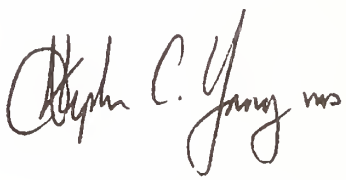
May 7, 1997

The Lung Transplantation Program at the Johns Hopkins Hospital was established in 1993. The UNOS Center Specific Report which evaluates patient and graft survival from January 1, 1998 through April 3, 1994 therefore only includes a single patient transplanted at our institution.

Since that time, we have performed 23 single and bilateral lung transplants. During the period of January 1, 1995 through the present, 19 transplants were performed. Two of these were pediatric recipients, the population of which is served only by a few transplant centers around the country. The current 1- month and 1-year survival for our lung transplant program is 78% and 68%, respectively. In fact, the 1- and 6-month survival rates for patients transplanted since January 1, 1996 is 89%. We believe that the current results are the most accurate indicator of survival expected for patients undergoing a lung transplant at Johns Hopkins.

We believe that this data emphasizes the commitment of the Johns Hopkins Medical Institution to provide the highest quality of pre- and post-operative care for this complicated group of patients. We are fortunate to have available to us the expertise and experience of a diverse group of clinicians necessary to support a successful lung transplantation program. We will endeavor to continue to provide the finest patient care available found anywhere in the United States.

Stephen C. Yang, M.D.
Director, Lung Transplantation Program



Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Maryland Medical System - Baltimore MD
Provider Number 210002 (MDUM)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	92.4	5	100.0	88.3	6	6	0	100.0	88.9	11.1	0.38
1 Year	1	100.0	73.8	5	100.0	75.4	6	6	0	100.0	75.1	24.9	0.15
Cond. [3] 3 Years	1	100.0	74.2				1	1	0	100.0	74.2	25.8	1.00
3 Years [3]		100.0	54.8										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	92.9	5	100.0	88.3	6	6.0	0.0	100.0	89.0	11.0	0.38
1 Year	1	100.0	73.9	5	100.0	75.4	6	6.0	0.0	100.0	75.1	24.9	0.15
Cond. [3] 3 Years	1	100.0	74.7				1	1.0	0.0	100.0	74.7	25.3	1.00
3 Years [3]		100.0	55.2										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Maryland Medical System - Baltimore MD
Provider Number 210002 (MDUM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**6**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	33.3	724	33.9
	Single Right Lung Tx	4	66.7	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	4	66.7	1104	51.7
	36-49	2	33.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	1	16.7	633	29.6
	Male	5	83.3	1502	70.4
Donor Race	White	4	66.7	1649	77.2
	Black	2	33.3	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	16.7	440	20.6
	36-49	1	16.7	695	32.6
	50+	4	66.7	874	40.9
Recipient Gender	Female	3	50.0	1129	52.9
	Male	3	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	6	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	6	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	6	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	6	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	3	50.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	2	33.3	535	25.1
	1993	3	50.0	660	30.9
	1994	1	16.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	50.0	120	16.6
	> 2.5 - 3.0 hrs	1	50.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	25.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	3	75.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Michigan Medical Center - Ann Arbor MI
Provider Number 230046 (MIUM)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	28	89.3	83.9	27	85.2	89.7	55	55	7	87.3	86.8	0.5	0.90
1 Year	28	67.9	66.5	27	74.1	73.5	55	55	16	70.9	69.9	1.0	0.87
Cond. [3] 3 Years	19	78.9	75.0				19	19	4	78.9	75.0	3.9	0.68
3 Years [3]		53.6	49.9										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	26	90.4	85.2	26	88.5	91.0	52	52.0	5.5	89.4	88.1	1.3	0.75
1 Year	26	73.1	68.8	26	76.9	75.0	52	52.0	13.0	75.0	71.9	3.1	0.60
Cond. [3] 3 Years	19	78.9	76.3				19	19.0	4.0	78.9	76.3	2.6	0.78
3 Years [3]		57.7	52.5										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Michigan Medical Center - Ann Arbor MI
Provider Number 230046 (MIUM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**55**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	18	32.7	724	33.9
	Single Right Lung Tx	20	36.4	714	33.4
	Double Lung Tx	17	30.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	12	21.8	449	21.0
	18-35	22	40.0	1104	51.7
	36-49	20	36.4	410	19.2
	50+	1	1.8	85	4.0
Donor Gender	Female	11	20.0	633	29.6
	Male	44	80.0	1502	70.4
Donor Race	White	41	74.5	1649	77.2
	Black	11	20.0	295	13.8
	Hispanic	3	5.5	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	8	14.5	440	20.6
	36-49	27	49.1	695	32.6
	50+	20	36.4	874	40.9
Recipient Gender	Female	30	54.5	1129	52.9
	Male	25	45.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	52	94.5	1948	91.2
	Black	3	5.5	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	50	90.9	2062	96.6
	Yes	3	5.5	64	3.0
	Not Reported	2	3.6	9	0.4
On Ventilator at Transplant	No	48	87.3	2004	93.9
	Yes	3	5.5	80	3.7
	Not Reported	4	7.3	51	2.4
Medical Condition at Transplant	Not Hospitalized	50	90.9	1805	84.5
	Hospitalized	2	3.6	180	8.4
	In ICU	3	5.5	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	22	40.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	10	18.2	570	26.7
	Alpha-1-Antitrypsin Deficiency	9	16.4	305	14.3
	Primary Pulmonary Hypertension	5	9.1	231	10.8
	Eisenmenger's Syndrome/Congenital	4	7.3	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	5	9.1	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	5.5	202	9.5
	1991	19	34.5	401	18.8
	1992	17	30.9	535	25.1
	1993	10	18.2	660	30.9
	1994	6	10.9	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	5	27.8	106	14.6
	> 3.0 - 3.5 hrs	4	22.2	104	14.4
	> 3.5 - 4.0 hrs	4	22.2	211	29.1
	> 4.0 hrs	4	22.2	166	22.9
	Not Reported	1	5.6	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	3	15.0	95	13.3
	> 3.0 - 3.5 hrs	6	30.0	114	16.0
	> 3.5 - 4.0 hrs	8	40.0	218	30.5
	> 4.0 hrs	3	15.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	4	23.5	125	17.9
	> 3.5 - 4.5 hrs	5	29.4	145	20.8
	> 4.5 - 5.5 hrs	5	29.4	155	22.2
	> 5.5 - 6.5 hrs	1	5.9	126	18.1
	> 6.5 hrs	1	5.9	118	16.9
	Not Reported	1	5.9	28	4.0
Double Lung, Right	Up to 3.5 hrs	4	23.5	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	2	11.8	140	20.1
	> 5.5 - 6.5 hrs	2	11.8	86	12.3
	> 6.5 hrs	8	47.1	99	14.2
	Not Reported	1	5.9	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Abbott-Northwestern Hospital - Minneapolis MN
Provider Number 240906 (MNAN)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	11	90.9	80.9	3	100.0	92.0	14	14	1	92.9	83.3	9.6	0.31
1 Year	11	72.7	64.8	3	66.7	75.1	14	14	4	71.4	67.0	4.4	0.72
Cond. [3] 3 Years	8	62.5	74.8				8	8	3	62.5	74.8	-12.3	0.41
3 Years [3]		45.5	48.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	11	90.9	81.3	3	100.0	91.9	14	14.0	1.0	92.9	83.6	9.3	0.32
1 Year	11	72.7	66.1	3	66.7	75.3	14	14.0	4.0	71.4	68.1	3.3	0.78
Cond. [3] 3 Years	8	62.5	74.7				8	8.0	3.0	62.5	74.7	-12.2	0.41
3 Years [3]		45.5	49.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Abbott-Northwestern Hospital - Minneapolis MN
Provider Number 240906 (MNAN)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**14**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	14.3	724	33.9
	Single Right Lung Tx	6	42.9	714	33.4
	Double Lung Tx	6	42.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	7.1	449	21.0
	18-35	6	42.9	1104	51.7
	36-49	7	50.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	5	35.7	633	29.6
	Male	9	64.3	1502	70.4
Donor Race	White	14	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	7.1	440	20.6
	36-49	8	57.1	695	32.6
	50+	5	35.7	874	40.9
Recipient Gender	Female	6	42.9	1129	52.9
	Male	8	57.1	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	14	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	14	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	14	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	12	85.7	1805	84.5
	Hospitalized	1	7.1	180	8.4
	In ICU	1	7.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	21.4	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	7.1	570	26.7
	Alpha-1-Antitrypsin Deficiency	9	64.3	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	7.1	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	2	14.3	33	1.5
	1989	4	28.6	92	4.3
	1990	2	14.3	202	9.5
	1991	1	7.1	401	18.8
	1992	5	35.7	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	50.0	106	14.6
	> 3.0 - 3.5 hrs	1	50.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	2	33.3	114	16.0
	> 3.5 - 4.0 hrs	3	50.0	218	30.5
	> 4.0 hrs	1	16.7	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	4	66.7	125	17.9
	> 3.5 - 4.5 hrs	1	16.7	145	20.8
	> 4.5 - 5.5 hrs	1	16.7	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	4	66.7	161	23.1
	> 3.5 - 4.5 hrs	1	16.7	165	23.7
	> 4.5 - 5.5 hrs	1	16.7	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for St Mary's Hospital - Rochester MN
Provider Number 240010 (MNSM)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	11	100.0	89.1	14	92.9	90.0	25	25	1	96.0	89.6	6.4	0.28
1 Year	11	81.8	72.5	14	78.6	72.7	25	25	5	80.0	72.6	7.4	0.39
Cond. [3] 3 Years	9	77.8	76.0				9	9	2	77.8	76.0	1.7	0.90
3 Years [3]		63.6	55.2										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	11	100.0	89.4	14	92.9	90.2	25	25.0	1.0	96.0	89.8	6.2	0.30
1 Year	11	81.8	73.8	14	78.6	73.3	25	25.0	5.0	80.0	73.6	6.4	0.45
Cond. [3] 3 Years	9	77.8	77.0				9	9.0	2.0	77.8	77.0	0.8	0.95
3 Years [3]		63.6	56.8										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

St Mary's Hospital - Rochester MN
Provider Number 240010 (MNSM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**25**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	16	64.0	724	33.9
	Single Right Lung Tx	8	32.0	714	33.4
	Double Lung Tx	1	4.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	9	36.0	449	21.0
	18-35	8	32.0	1104	51.7
	36-49	7	28.0	410	19.2
	50+	1	4.0	85	4.0
Donor Gender	Female	10	40.0	633	29.6
	Male	15	60.0	1502	70.4
Donor Race	White	25	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	4.0	440	20.6
	36-49	10	40.0	695	32.6
	50+	14	56.0	874	40.9
Recipient Gender	Female	12	48.0	1129	52.9
	Male	13	52.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	24	96.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	1	4.0	3	0.1
Previous Lung Transplant	No	25	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	25	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	25	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	4	16.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	12.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	13	52.0	305	14.3
	Primary Pulmonary Hypertension	1	4.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	4	16.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	12.0	202	9.5
	1991	3	12.0	401	18.8
	1992	12	48.0	535	25.1
	1993	6	24.0	660	30.9
	1994	1	4.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	12.5	120	16.6
	> 2.5 - 3.0 hrs	1	6.3	106	14.6
	> 3.0 - 3.5 hrs	1	6.3	104	14.4
	> 3.5 - 4.0 hrs	9	56.3	211	29.1
	> 4.0 hrs	2	12.5	166	22.9
	Not Reported	1	6.3	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	12.5	103	14.4
	> 2.5 - 3.0 hrs	2	25.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	3	37.5	218	30.5
	> 4.0 hrs	2	25.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	100.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	100.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: St Mary's Hospital
1216 2nd Street, SW, Rochester, MN 55092
Provider Number 240010 (MNSM)

May 8, 1997

The current one- and five-year Kaplan-Meier actuarial survival for all patients receiving lung transplants at Mayo Clinic/Saint Mary's Hospital since the initiation of the program on June 10, 1990 is 80.6 and 50.6 percent, respectively.

These results reflect the multi-disciplinary approach to patient care at Mayo Medical Center, a stable cardiothoracic transplant group, and a continuing institutional commitment to the provision of high quality, cost-effective care.

Christopher G. A. McGregor, M.B., F.R.C.S.
Director, Cardiothoracic Transplantation

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Fairview University Medical Center - Minneapolis MN
Provider Number 240049 (MNUM)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	44	90.9	83.4	52	92.3	89.8	96	96	8	91.7	86.9	4.8	0.13
1 Year	44	81.8	67.1	52	67.3	74.5	96	96	25	74.0	71.1	2.8	0.51
Cond. [3] 3 Years	36	80.5	74.7				36	35	7	80.5	74.7	5.8	0.40
3 Years [3]		65.8	50.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	42	90.4	84.4	52	93.2	90.3	93	93.0	7.5	91.9	87.7	4.3	0.18
1 Year	42	83.1	69.5	52	68.0	75.4	93	93.0	23.5	74.7	72.8	2.0	0.65
Cond. [3] 3 Years	35	82.8	76.1				35	34.0	6.0	82.8	76.1	6.7	0.34
3 Years [3]		68.8	52.9										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Fairview University Medical Center - Minneapolis MN
Provider Number 240049 (MNUM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**96**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	41	42.7	724	33.9
	Single Right Lung Tx	31	32.3	714	33.4
	Double Lung Tx	24	25.0	697	32.6
Donor Age	0-5	2	2.1	33	1.5
	6-10	2	2.1	54	2.5
	11-17	16	16.7	449	21.0
	18-35	47	49.0	1104	51.7
	36-49	22	22.9	410	19.2
	50+	7	7.3	85	4.0
Donor Gender	Female	35	36.5	633	29.6
	Male	61	63.5	1502	70.4
Donor Race	White	89	92.7	1649	77.2
	Black	7	7.3	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	2	2.1	25	1.2
	6-10	1	1.0	25	1.2
	11-17	2	2.1	76	3.6
	18-35	16	16.7	440	20.6
	36-49	35	36.5	695	32.6
	50+	40	41.7	874	40.9
Recipient Gender	Female	56	58.3	1129	52.9
	Male	40	41.7	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	93	96.9	1948	91.2
	Black	2	2.1	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	1	1.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	92	95.8	2062	96.6
	Yes	4	4.2	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	93	96.9	2004	93.9
	Yes	2	2.1	80	3.7
	Not Reported	1	1.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	89	92.7	1805	84.5
	Hospitalized	4	4.2	180	8.4
	In ICU	3	3.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	25	26.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	17	17.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	27	28.1	305	14.3
	Primary Pulmonary Hypertension	14	14.6	231	10.8
	Eisenmenger's Syndrome/Congenital	3	3.1	96	4.5
	Retransplant	1	1.0	14	0.7
	Other	9	9.4	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	2	2.1	33	1.5
	1989	6	6.3	92	4.3
	1990	11	11.5	202	9.5
	1991	14	14.6	401	18.8
	1992	25	26.0	535	25.1
	1993	29	30.2	660	30.9
	1994	9	9.4	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	4	9.8	120	16.6
	> 2.5 - 3.0 hrs	5	12.2	106	14.6
	> 3.0 - 3.5 hrs	5	12.2	104	14.4
	> 3.5 - 4.0 hrs	10	24.4	211	29.1
	> 4.0 hrs	17	41.5	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	4	12.9	103	14.4
	> 2.5 - 3.0 hrs	4	12.9	95	13.3
	> 3.0 - 3.5 hrs	3	9.7	114	16.0
	> 3.5 - 4.0 hrs	12	38.7	218	30.5
	> 4.0 hrs	8	25.8	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	3	12.5	125	17.9
	> 3.5 - 4.5 hrs	4	16.7	145	20.8
	> 4.5 - 5.5 hrs	8	33.3	155	22.2
	> 5.5 - 6.5 hrs	6	25.0	126	18.1
	> 6.5 hrs	3	12.5	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	6	25.0	161	23.1
	> 3.5 - 4.5 hrs	8	33.3	165	23.7
	> 4.5 - 5.5 hrs	6	25.0	140	20.1
	> 5.5 - 6.5 hrs	3	12.5	86	12.3
	> 6.5 hrs	1	4.2	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Fairview-University Medical Center
420 Delaware Street., S.E., Minneapolis, MN 55455
Provider Number 240049 (MNUM)

May 15, 1997

Fairview University Medical Center Thoracic Transplant Program is pleased that UNOS lung transplant survival statistics for our Thoracic Transplant Program exceed national and expected survival statistics. Numerous factors contribute to our program's successful track record. These include:

Multi-disciplinary transplantation teams. The integrated, multi-disiplinary transplantation teams include cardiologists, pulmonologists, surgeons, nurses, social workers, and financial representatives. Team members also consult with anesthesiologists, medical ethicists, immunologists, infectious disease practitioners, pathologists, and radiologists.

Experienced transplant teams. Members of the transplantation teams represent over 200 years of transplantation experience. Over 520 thoracic transplantations have been performed since 1978. Lung transplants during this time total 98.

Continuous quality improvement approach. Weekly meetings of the heart transplant team, lung transplant team, and administrative team address problem solving, identifying bench marks, incorporating staff education, implementing pilot projects, and establishing feedback mechanisms. Strategic planning initiatives are addressed monthly by an executive steering committee.

Research emphasis. A strong research emphasis enables our program to expeditiously incorporate innovative technologies and new therapies into patient care protocols.

Actual graft survival rate at 1 month, 1 year and 3 years was calculated as follows:
91.7%, 74.7%, and 80.5% respectively.

Actual patient survival rate at 1 month, 1 year and 3 years was calculated as follows:
91.9%, 74.7%, and 82.8% respectively.

Expected graft survival rate at 1 month, 1 year and 3 years was calculated as follows:
86.9%, 71.1%, and 74.7% respectively.

Expected patient survival rate at 1 month, 1 year and 3 years were calculated as follows:
87.7%, 72.8%, and 76.1% respectively.

We believe our excellent statistics are a reflection of our multi-disciplinary approach, with pre-transplant, perioperative and post-transplant follow-up and close cooperation among medical, surgical, and other specialists.

Marshall I. Hertz, M.D.
Medical Director

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Barnes-Jewish Hospital - Saint Louis MO
Provider Number 260014 (MOBH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	125	89.6	84.0	90	95.6	89.2	215	215	17	92.1	86.1	5.9	<0.01*
1 Year	125	76.8	68.9	90	86.5	72.9	215	214	41	80.9	70.6	10.3	<0.01*
Cond. [3] 3 Years	96	89.6	78.6				96	96	10	89.6	78.6	11.0	<0.01*
3 Years [3]		68.8	54.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	122	91.0	84.7	89	96.6	89.9	211	211.0	14.0	93.4	86.9	6.5	<0.01*
1 Year	122	77.9	70.3	89	87.5	74.2	211	210.0	38.0	81.9	71.9	10.0	<0.01*
Cond. [3] 3 Years	95	90.5	79.7				95	95.0	9.0	90.5	79.7	10.8	<0.01*
3 Years [3]		70.5	56.0										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Barnes-Jewish Hospital - Saint Louis MO
Provider Number 260014 (MOBH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**215**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	49	22.8	724	33.9
	Single Right Lung Tx	52	24.2	714	33.4
	Double Lung Tx	114	53.0	697	32.6
Donor Age	0-5	1	0.5	33	1.5
	6-10	0	0.0	54	2.5
	11-17	54	25.1	449	21.0
	18-35	120	55.8	1104	51.7
	36-49	36	16.7	410	19.2
	50+	4	1.9	85	4.0
Donor Gender	Female	53	24.7	633	29.6
	Male	162	75.3	1502	70.4
Donor Race	White	180	83.7	1649	77.2
	Black	30	14.0	295	13.8
	Hispanic	4	1.9	166	7.8
	Asian	1	0.5	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	62	28.8	440	20.6
	36-49	75	34.9	695	32.6
	50+	78	36.3	874	40.9
Recipient Gender	Female	115	53.5	1129	52.9
	Male	100	46.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	194	90.2	1948	91.2
	Black	6	2.8	85	4.0
	Hispanic	3	1.4	58	2.7
	Asian	3	1.4	17	0.8
	Other	9	4.2	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	210	97.7	2062	96.6
	Yes	5	2.3	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	209	97.2	2004	93.9
	Yes	6	2.8	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	179	83.3	1805	84.5
	Hospitalized	23	10.7	180	8.4
	In ICU	13	6.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	69	32.1	710	33.3
	Fibrosis (Cystic/Idiopathic)	50	23.3	570	26.7
	Alpha-1-Antitrypsin Deficiency	47	21.9	305	14.3
	Primary Pulmonary Hypertension	31	14.4	231	10.8
	Eisenmenger's Syndrome/Congenital	5	2.3	96	4.5
	Retransplant	1	0.5	14	0.7
	Other	12	5.6	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	5	2.3	33	1.5
	1989	23	10.7	92	4.3
	1990	37	17.2	202	9.5
	1991	42	19.5	401	18.8
	1992	46	21.4	535	25.1
	1993	48	22.3	660	30.9
	1994	14	6.5	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	2.0	120	16.6
	> 2.5 - 3.0 hrs	1	2.0	106	14.6
	> 3.0 - 3.5 hrs	6	12.2	104	14.4
	> 3.5 - 4.0 hrs	13	26.5	211	29.1
	> 4.0 hrs	28	57.1	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	3.8	103	14.4
	> 2.5 - 3.0 hrs	4	7.7	95	13.3
	> 3.0 - 3.5 hrs	3	5.8	114	16.0
	> 3.5 - 4.0 hrs	13	25.0	218	30.5
	> 4.0 hrs	30	57.7	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	9	7.9	125	17.9
	> 3.5 - 4.5 hrs	11	9.6	145	20.8
	> 4.5 - 5.5 hrs	29	25.4	155	22.2
	> 5.5 - 6.5 hrs	31	27.2	126	18.1
	> 6.5 hrs	33	28.9	118	16.9
	Not Reported	1	0.9	28	4.0
Double Lung, Right	Up to 3.5 hrs	13	11.4	161	23.1
	> 3.5 - 4.5 hrs	26	22.8	165	23.7
	> 4.5 - 5.5 hrs	32	28.1	140	20.1
	> 5.5 - 6.5 hrs	21	18.4	86	12.3
	> 6.5 hrs	21	18.4	99	14.2
	Not Reported	1	0.9	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Saint Louis Children's Hospital - Saint Louis MO
Provider Number 263301 (MOCH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	21	81.0	78.3	37	91.9	85.3	58	58	7	87.9	82.8	5.2	0.18
1 Year	21	52.4	58.9	37	67.6	66.3	58	58	22	62.1	63.6	-1.5	0.76
Cond. [3] 3 Years	11	81.8	62.9				11	11	2	81.8	62.9	18.9	0.16
3 Years [3]		42.9	37.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	18	88.6	80.9	37	91.8	85.9	54	54.0	5.0	90.7	84.3	6.4	0.09
1 Year	18	60.0	63.1	37	73.5	68.7	54	53.0	16.5	69.1	66.9	2.2	0.66
Cond. [3] 3 Years	11	81.8	66.3				11	11.0	2.0	81.8	66.3	15.5	0.24
3 Years [3]		49.1	41.8										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Saint Louis Children's Hospital - Saint Louis MO
Provider Number 263301 (MOCH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**58**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	6.9	724	33.9
	Single Right Lung Tx	4	6.9	714	33.4
	Double Lung Tx	50	86.2	697	32.6
Donor Age	0-5	19	32.8	33	1.5
	6-10	21	36.2	54	2.5
	11-17	12	20.7	449	21.0
	18-35	5	8.6	1104	51.7
	36-49	0	0.0	410	19.2
	50+	1	1.7	85	4.0
Donor Gender	Female	25	43.1	633	29.6
	Male	33	56.9	1502	70.4
Donor Race	White	42	72.4	1649	77.2
	Black	10	17.2	295	13.8
	Hispanic	3	5.2	166	7.8
	Asian	3	5.2	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	16	27.6	25	1.2
	6-10	13	22.4	25	1.2
	11-17	26	44.8	76	3.6
	18-35	3	5.2	440	20.6
	36-49	0	0.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	32	55.2	1129	52.9
	Male	26	44.8	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	54	93.1	1948	91.2
	Black	2	3.4	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	2	3.4	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	54	93.1	2062	96.6
	Yes	4	6.9	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	46	79.3	2004	93.9
	Yes	12	20.7	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	33	56.9	1805	84.5
	Hospitalized	6	10.3	180	8.4
	In ICU	19	32.8	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	33	56.9	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	9	15.5	231	10.8
	Eisenmenger's Syndrome/Congenital	10	17.2	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	6	10.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	5.2	202	9.5
	1991	12	20.7	401	18.8
	1992	16	27.6	535	25.1
	1993	15	25.9	660	30.9
	1994	12	20.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	25.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	2	50.0	211	29.1
	> 4.0 hrs	1	25.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	25.0	114	16.0
	> 3.5 - 4.0 hrs	1	25.0	218	30.5
	> 4.0 hrs	2	50.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	11	22.0	125	17.9
	> 3.5 - 4.5 hrs	14	28.0	145	20.8
	> 4.5 - 5.5 hrs	17	34.0	155	22.2
	> 5.5 - 6.5 hrs	6	12.0	126	18.1
	> 6.5 hrs	1	2.0	118	16.9
	Not Reported	1	2.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	4	8.0	161	23.1
	> 3.5 - 4.5 hrs	16	32.0	165	23.7
	> 4.5 - 5.5 hrs	16	32.0	140	20.1
	> 5.5 - 6.5 hrs	11	22.0	86	12.3
	> 6.5 hrs	2	4.0	99	14.2
	Not Reported	1	2.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Saint Louis Children's Hospital
One Children's Place, St. Louis, MO 63110
Provider Number 263301 (MOCH)

June 2, 1997

The lung transplant program at St. Louis Children's Hospital was initiated July 1, 1990 to the present. Up to this point in time we have performed a total of 126 isolated lung transplants. This survival report covers our experience through April 30, 1994 and thus, includes 58 of those transplants. Our program is directed almost exclusively to children, that is under the age of 18 years. Fifty-five out of 58 of our transplants were performed in children under the age of 17 years. The total performed nationally for this age group was 126. Thus, our center performed 46% of all the lung transplants performed in children under the age of 17.

In addition to age, other factors make up the characteristics of our transplant experience which would make it a particularly high risk. Twelve (20%) of our patients were on the ventilator at the time of transplant; this is compared with 3.7% of the national average. Nineteen (32.8%) were in the Intensive Care Unit prior to transplant as compared to 6.6% of the national average. None of our patients had COPD or Alpha-l-Antitrypsin deficiency. These two diagnoses make up the bulk of transplants according to the national average. These are also considered the lowest risk diagnostic groups.

The graft survival and patient survival for era 1 (1/l/88 - 4/30/92) was slightly better at our center for one month and 3 years and slightly worse at 1 year. None of these reached statistical significance. The graft and patient survival for era 2 at 1 month and 1 year were both slightly better than the expected rates. Again, these did not reach statistical significance.

In summary, the actuarial survival is generally at or slightly greater than the expected survival rate for our patient population which is generally composed of a higher risk group of patients than that seen on average nationally.

Charles B. Huddleston, M.D.
Associate Professor of Surgery
Chief, Section of Pediatric Cardiothoracic Surgery
Surgical Director Heart and Lung Transplant Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Saint Louis University Hospital - Saint Louis MO
Provider Number 260105 (MOSL)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	10	60.0	84.0	13	92.3	92.1	23	23	5	78.3	88.6	-10.3	0.11
1 Year	10	60.0	67.4	13	92.3	77.5	23	23	5	78.3	73.1	5.1	0.57
Cond. [3] 3 Years	6	83.3	73.6				6	6	1	83.3	73.6	9.7	0.58
3 Years [3]		50.0	49.6										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	10	60.0	84.3	13	92.3	92.6	23	23.0	5.0	78.3	89.0	-10.7	0.09
1 Year	10	60.0	68.4	13	92.3	78.4	23	23.0	5.0	78.3	74.0	4.2	0.63
Cond. [3] 3 Years	6	83.3	75.2				6	6.0	1.0	83.3	75.2	8.1	0.64
3 Years [3]		50.0	51.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Saint Louis University Hospital - Saint Louis MO
Provider Number 260105 (MOSL)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**23**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	9	39.1	724	33.9
	Single Right Lung Tx	11	47.8	714	33.4
	Double Lung Tx	3	13.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	7	30.4	449	21.0
	18-35	13	56.5	1104	51.7
	36-49	3	13.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	5	21.7	633	29.6
	Male	18	78.3	1502	70.4
Donor Race	White	17	73.9	1649	77.2
	Black	5	21.7	295	13.8
	Hispanic	1	4.3	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	4.3	76	3.6
	18-35	3	13.0	440	20.6
	36-49	11	47.8	695	32.6
	50+	8	34.8	874	40.9
Recipient Gender	Female	11	47.8	1129	52.9
	Male	12	52.2	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	22	95.7	1948	91.2
	Black	1	4.3	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	23	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	23	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	22	95.7	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	1	4.3	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	6	26.1	710	33.3
	Fibrosis (Cystic/Idiopathic)	4	17.4	570	26.7
	Alpha-1-Antitrypsin Deficiency	10	43.5	305	14.3
	Primary Pulmonary Hypertension	1	4.3	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	8.7	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	4.3	33	1.5
	1989	2	8.7	92	4.3
	1990	1	4.3	202	9.5
	1991	3	13.0	401	18.8
	1992	8	34.8	535	25.1
	1993	6	26.1	660	30.9
	1994	2	8.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	22.2	120	16.6
	> 2.5 - 3.0 hrs	1	11.1	106	14.6
	> 3.0 - 3.5 hrs	1	11.1	104	14.4
	> 3.5 - 4.0 hrs	2	22.2	211	29.1
	> 4.0 hrs	3	33.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	3	27.3	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	4	36.4	218	30.5
	> 4.0 hrs	4	36.4	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	33.3	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	1	33.3	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	1	33.3	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	1	33.3	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	2	66.7	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Mississippi Medical Center - Jackson MS
Provider Number 250001 (MSUM)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	7	42.9	76.6				7	7	4	42.9	76.6	-33.7	0.03*
1 Year	7	42.9	60.8				7	7	4	42.9	60.8	-17.9	0.31
Cond. [3] 3 Years	3	100.0	80.4				3	3	0	100.0	80.4	19.6	1.00
3 Years [3]		42.9	48.9										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	7	42.9	76.9				7	7.0	4.0	42.9	76.9	-34.0	0.02*
1 Year	7	42.9	61.3				7	7.0	4.0	42.9	61.3	-18.4	0.30
Cond. [3] 3 Years	3	100.0	80.4				3	3.0	0.0	100.0	80.4	19.6	1.00
3 Years [3]		42.9	49.3										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Mississippi Medical Center - Jackson MS
Provider Number 250001 (MSUM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**7**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	28.6	724	33.9
	Single Right Lung Tx	2	28.6	714	33.4
	Double Lung Tx	3	42.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	42.9	449	21.0
	18-35	3	42.9	1104	51.7
	36-49	1	14.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	28.6	633	29.6
	Male	5	71.4	1502	70.4
Donor Race	White	7	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	3	42.9	695	32.6
	50+	4	57.1	874	40.9
Recipient Gender	Female	3	42.9	1129	52.9
	Male	4	57.1	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	7	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	7	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	7	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	6	85.7	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	1	14.3	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	42.9	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	28.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	14.3	305	14.3
	Primary Pulmonary Hypertension	1	14.3	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	4	57.1	33	1.5
	1989	2	28.6	92	4.3
	1990	1	14.3	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	50.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	1	50.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	50.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	1	50.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	3	100.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	3	100.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for North Carolina Baptist Hospital - Winston-Salem NC
Provider Number 340047 (NCBG)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	80.4				2	2	0	100.0	80.4	19.6	1.00
1 Year	2	0.0	62.7				2	2	2	0.0	62.7	-62.7	0.14
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	80.6				2	2.0	0.0	100.0	80.6	19.4	1.00
1 Year	2	0.0	63.5				2	2.0	2.0	0.0	63.5	-63.5	0.13
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

North Carolina Baptist Hospital - Winston-Salem NC
Provider Number 340047 (NCBG)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**2**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	100.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	2	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	1	50.0	633	29.6
	Male	1	50.0	1502	70.4
Donor Race	White	2	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	50.0	695	32.6
	50+	1	50.0	874	40.9
Recipient Gender	Female	1	50.0	1129	52.9
	Male	1	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	2	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	2	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	2	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	2	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	50.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	50.0	92	4.3
	1990	1	50.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	50.0	120	16.6
	> 2.5 - 3.0 hrs	1	50.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response Form: North Carolina Baptist Hospital
Medical Center Boulevard, Winston-Salem, NC 27157
Provider Number 340047 (NCBG)

May 9, 1997

The North Carolina Baptist Hospital supports the release of center specific survival statistics in the field of thoracic transplantation.

In 1989 and 1990, two single lung transplants were performed at North Carolina Baptist Hospital and then the program was voluntarily inactivated.

We have just recently applied for UNOS approval to reinitiate a lung transplant program. We have recruited highly trained individuals in thoracic surgery and pulmonary medicine with special interest in the field of transplantation. We anticipate that full approval will be granted and that potential recipients will be listed by July 1997.

Our cardiac transplant program has been in existence since November 1993. To date, we have performed 31 transplants with one-, two-, and three-year survival rates of 100%. We would anticipate that our experience with cardiac transplantation will have a significant influence on our lung transplant program.

We encourage direct inquiry regarding our transplant programs, survival statistics and personnel.

Timothy E. Oaks, M.D.
Director, Thoracic Transplantation

Timothy E. Oaks, M.D.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Duke University Medical Center - Durham NC
Provider Number 340030 (NCDU)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	67.4	26	96.2	90.8	27	27	2	92.6	89.9	2.7	0.63
1 Year	1	0.0	39.2	26	92.3	76.7	27	27	3	88.9	75.3	13.6	0.09
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	69.5	26	96.2	91.3	27	27.0	2.0	92.6	90.5	2.1	0.70
1 Year	1	0.0	37.7	26	92.3	77.3	27	27.0	3.0	88.9	75.8	13.1	0.09
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Duke University Medical Center - Durham NC
Provider Number 340030 (NCDU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**27**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	9	33.3	724	33.9
	Single Right Lung Tx	6	22.2	714	33.4
	Double Lung Tx	12	44.4	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	1	3.7	54	2.5
	11-17	6	22.2	449	21.0
	18-35	11	40.7	1104	51.7
	36-49	8	29.6	410	19.2
	50+	1	3.7	85	4.0
Donor Gender	Female	7	25.9	633	29.6
	Male	20	74.1	1502	70.4
Donor Race	White	19	70.4	1649	77.2
	Black	7	25.9	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	1	3.7	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	5	18.5	440	20.6
	36-49	13	48.1	695	32.6
	50+	9	33.3	874	40.9
Recipient Gender	Female	17	63.0	1129	52.9
	Male	10	37.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	25	92.6	1948	91.2
	Black	1	3.7	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	1	3.7	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	27	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	25	92.6	2004	93.9
	Yes	2	7.4	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	24	88.9	1805	84.5
	Hospitalized	1	3.7	180	8.4
	In ICU	2	7.4	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	11	40.7	710	33.3
	Fibrosis (Cystic/Idiopathic)	4	14.8	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	11.1	305	14.3
	Primary Pulmonary Hypertension	2	7.4	231	10.8
	Eisenmenger's Syndrome/Congenital	2	7.4	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	4	14.8	204	9.6
	Not Reported	1	3.7	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	5	18.5	535	25.1
	1993	15	55.6	660	30.9
	1994	7	25.9	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	4	44.4	120	16.6
	> 2.5 - 3.0 hrs	1	11.1	106	14.6
	> 3.0 - 3.5 hrs	1	11.1	104	14.4
	> 3.5 - 4.0 hrs	2	22.2	211	29.1
	> 4.0 hrs	1	11.1	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	16.7	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	16.7	114	16.0
	> 3.5 - 4.0 hrs	4	66.7	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	3	25.0	125	17.9
	> 3.5 - 4.5 hrs	1	8.3	145	20.8
	> 4.5 - 5.5 hrs	2	16.7	155	22.2
	> 5.5 - 6.5 hrs	4	33.3	126	18.1
	> 6.5 hrs	1	8.3	118	16.9
	Not Reported	1	8.3	28	4.0
Double Lung, Right	Up to 3.5 hrs	4	33.3	161	23.1
	> 3.5 - 4.5 hrs	3	25.0	165	23.7
	> 4.5 - 5.5 hrs	3	25.0	140	20.1
	> 5.5 - 6.5 hrs	1	8.3	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	8.3	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of North Carolina Hospitals - Chapel Hill NC
Provider Number 340061 (NCMH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	48	91.7	85.0	37	81.1	88.6	85	85	11	87.1	86.6	0.5	0.89
1 Year	48	77.1	68.4	37	62.2	72.3	85	85	25	70.6	70.1	0.5	0.91
Cond. [3] 3 Years	37	62.2	77.4				37	37	14	62.2	77.4	-15.2	0.02*
3 Years [3]		47.9	52.9										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	46	93.5	86.6	35	85.7	90.3	81	81.0	8.0	90.1	88.2	1.9	0.55
1 Year	46	79.3	70.6	35	65.7	74.9	81	81.0	21.5	73.5	72.4	1.0	0.82
Cond. [3] 3 Years	37	64.9	79.0				37	37.0	13.0	64.9	79.0	-14.2	0.02*
3 Years [3]		51.5	55.8										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of North Carolina Hospitals - Chapel Hill NC
Provider Number 340061 (NCMH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**85**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	11	12.9	724	33.9
	Single Right Lung Tx	14	16.5	714	33.4
	Double Lung Tx	60	70.6	697	32.6
Donor Age	0-5	3	3.5	33	1.5
	6-10	4	4.7	54	2.5
	11-17	11	12.9	449	21.0
	18-35	38	44.7	1104	51.7
	36-49	21	24.7	410	19.2
	50+	8	9.4	85	4.0
Donor Gender	Female	33	38.8	633	29.6
	Male	52	61.2	1502	70.4
Donor Race	White	72	84.7	1649	77.2
	Black	11	12.9	295	13.8
	Hispanic	1	1.2	166	7.8
	Asian	0	0.0	14	0.7
	Other	1	1.2	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	1	1.2	25	1.2
	6-10	2	2.4	25	1.2
	11-17	11	12.9	76	3.6
	18-35	45	52.9	440	20.6
	36-49	17	20.0	695	32.6
	50+	9	10.6	874	40.9
Recipient Gender	Female	46	54.1	1129	52.9
	Male	39	45.9	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	77	90.6	1948	91.2
	Black	4	4.7	85	4.0
	Hispanic	4	4.7	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	80	94.1	2062	96.6
	Yes	4	4.7	64	3.0
	Not Reported	1	1.2	9	0.4
On Ventilator at Transplant	No	75	88.2	2004	93.9
	Yes	10	11.8	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	56	65.9	1805	84.5
	Hospitalized	14	16.5	180	8.4
	In ICU	11	12.9	141	6.6
	Not Reported	4	4.7	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	13	15.3	710	33.3
	Fibrosis (Cystic/Idiopathic)	56	65.9	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	2.4	305	14.3
	Primary Pulmonary Hypertension	4	4.7	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	1	1.2	14	0.7
	Other	8	9.4	204	9.6
	Not Reported	1	1.2	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	11	12.9	202	9.5
	1991	26	30.6	401	18.8
	1992	22	25.9	535	25.1
	1993	20	23.5	660	30.9
	1994	6	7.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	9.1	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	3	27.3	211	29.1
	> 4.0 hrs	6	54.5	166	22.9
	Not Reported	1	9.1	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	7.1	114	16.0
	> 3.5 - 4.0 hrs	4	28.6	218	30.5
	> 4.0 hrs	8	57.1	165	23.1
	Not Reported	1	7.1	19	2.7
Double Lung, Left	Up to 3.5 hrs	2	3.3	125	17.9
	> 3.5 - 4.5 hrs	9	15.0	145	20.8
	> 4.5 - 5.5 hrs	9	15.0	155	22.2
	> 5.5 - 6.5 hrs	18	30.0	126	18.1
	> 6.5 hrs	20	33.3	118	16.9
	Not Reported	2	3.3	28	4.0
Double Lung, Right	Up to 3.5 hrs	2	3.3	161	23.1
	> 3.5 - 4.5 hrs	5	8.3	165	23.7
	> 4.5 - 5.5 hrs	11	18.3	140	20.1
	> 5.5 - 6.5 hrs	8	13.3	86	12.3
	> 6.5 hrs	32	53.3	99	14.2
	Not Reported	2	3.3	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Bryan Memorial Hospital - Lincoln NE
Provider Number 280003 (NEBM)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				8	100.0	89.6	8	8	0	100.0	89.6	10.4	0.31
1 Year				8	75.0	70.7	8	8	2	75.0	70.7	4.3	0.78
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/83-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				8	100.0	89.8	8	8.0	0.0	100.0	89.8	10.2	0.32
1 Year				8	75.0	71.1	8	8.0	2.0	75.0	71.1	3.9	0.79
Cond. [3] 3 Years													
3 Years [3]													

Notes:

[1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Bryan Memorial Hospital - Lincoln NE
Provider Number 280003 (NEBM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**8**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	50.0	724	33.9
	Single Right Lung Tx	1	12.5	714	33.4
	Double Lung Tx	3	37.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	4	50.0	449	21.0
	18-35	4	50.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	25.0	633	29.6
	Male	6	75.0	1502	70.4
Donor Race	White	7	87.5	1649	77.2
	Black	1	12.5	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	3	37.5	695	32.6
	50+	5	62.5	874	40.9
Recipient Gender	Female	3	37.5	1129	52.9
	Male	5	62.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	8	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	8	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	7	87.5	2004	93.9
	Yes	1	12.5	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	5	62.5	1805	84.5
	Hospitalized	1	12.5	180	8.4
	In ICU	2	25.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	4	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	4	50.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	3	37.5	535	25.1
	1993	4	50.0	660	30.9
	1994	1	12.5	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	2	50.0	106	14.6
	> 3.0 - 3.5 hrs	1	25.0	104	14.4
	> 3.5 - 4.0 hrs	1	25.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	100.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	2	66.7	125	17.9
	> 3.5 - 4.5 hrs	1	33.3	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	33.3	161	23.1
	> 3.5 - 4.5 hrs	1	33.3	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	1	33.3	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Newark Beth Israel Medical Center - Newark NJ
Provider Number 310002 (NJBI)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Era 1: Act. Rate (%)	Era 1: Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Era 2: Act. Rate (%)	Era 2: Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				14	78.6	89.4	14	14	3	78.6	89.4	-10.8	0.17
1 Year				14	64.3	73.0	14	14	5	64.3	73.0	-8.7	0.45
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Era 1: Act. Rate (%)	Era 1: Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Era 2: Act. Rate (%)	Era 2: Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				14	78.6	89.8	14	14.0	3.0	78.6	89.8	-11.3	0.14
1 Year				14	64.3	73.8	14	14.0	5.0	64.3	73.8	-9.5	0.40
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Newark Beth Israel Medical Center - Newark NJ
Provider Number 310002 (NJBI)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**14**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	5	35.7	724	33.9
	Single Right Lung Tx	7	50.0	714	33.4
	Double Lung Tx	2	14.3	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	7.1	449	21.0
	18-35	6	42.9	1104	51.7
	36-49	6	42.9	410	19.2
	50+	1	7.1	85	4.0
Donor Gender	Female	4	28.6	633	29.6
	Male	10	71.4	1502	70.4
Donor Race	White	8	57.1	1649	77.2
	Black	4	28.6	295	13.8
	Hispanic	2	14.3	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	14.3	440	20.6
	36-49	7	50.0	695	32.6
	50+	5	35.7	874	40.9
Recipient Gender	Female	8	57.1	1129	52.9
	Male	6	42.9	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	9	64.3	1948	91.2
	Black	2	14.3	85	4.0
	Hispanic	3	21.4	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	14	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	13	92.9	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	7.1	51	2.4
Medical Condition at Transplant	Not Hospitalized	10	71.4	1805	84.5
	Hospitalized	3	21.4	180	8.4
	In ICU	1	7.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	7	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	21.4	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	7.1	231	10.8
	Eisenmenger's Syndrome/Congenital	1	7.1	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	14.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	3	21.4	535	25.1
	1993	8	57.1	660	30.9
	1994	3	21.4	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	40.0	120	16.6
	> 2.5 - 3.0 hrs	1	20.0	106	14.6
	> 3.0 - 3.5 hrs	1	20.0	104	14.4
	> 3.5 - 4.0 hrs	1	20.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	3	42.9	103	14.4
	> 2.5 - 3.0 hrs	1	14.3	95	13.3
	> 3.0 - 3.5 hrs	1	14.3	114	16.0
	> 3.5 - 4.0 hrs	2	28.6	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	50.0	125	17.9
	> 3.5 - 4.5 hrs	1	50.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	50.0	161	23.1
	> 3.5 - 4.5 hrs	1	50.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Newark Beth Israel Medical Center
201 Lyons Avenue, Newark, NJ 07112
Provider Number 310002 (NJBI)

May 6, 1997

Newark Beth Israel Medical Center, an affiliate of the Saint Barnabas Health Care System, is a 607 bed teaching and tertiary referral center affiliated with the Mount Sinai School of Medicine. The medical center, which performed its first lung transplant in June 1992, is the site of the only lung transplant program in New Jersey.

After reviewing the data relating to our program's early experiences, we are pleased that, even accounting for the small number of lung transplants performed at Newark Beth Israel Medical Center, our observed survival rates are not statistically significantly different from the expected survival rates. These results were achieved despite other pertinent risk factors which were excluded from the analysis, such as low patient educational attainment, language barriers, and fragile patient domestic support systems. Nevertheless, in an effort to further improve outcomes, the medical and surgical directors of two very successful west coast lung transplant programs were asked to conduct an on-site evaluation of our program. Many of their recommendations, which focused on enhancing our candidate selection criteria, harvesting techniques, and immunosuppressive management have been incorporated into our protocols.

Newark Beth Israel Medical Center is proud of its accomplishments and the team of dedicated professionals who provide the highest quality care available and will continue to strive for excellence.

Mark Jay Zucker, M.D.
Director, Cardiothoracic Transplantation Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Presbyterian Hospital in NY City - New York NY
Provider Number 330012 (NYCP)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	44	81.4	81.2	44	87.8	85.1	88	84	13	84.5	83.1	1.4	0.69
1 Year	44	62.1	67.1	44	74.2	67.6	88	75	26	67.9	67.3	0.5	0.91
Cond. [3] 3 Years	25	68.5	71.1				25	18	7	68.5	71.1	-2.6	0.78
3 Years [3]		42.5	47.7										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	44	81.4	81.8	43	90.0	85.8	87	83.0	12.0	85.5	83.7	1.8	0.61
1 Year	44	62.1	68.1	43	76.1	68.6	87	74.0	25.0	68.7	68.4	0.3	0.94
Cond. [3] 3 Years	25	68.5	72.5				25	18.0	7.0	68.5	72.5	-4.0	0.66
3 Years [3]		42.5	49.4										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Presbyterian Hospital in NY City - New York NY
Provider Number 330012 (NYCP)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**88**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	27	30.7	724	33.9
	Single Right Lung Tx	36	40.9	714	33.4
	Double Lung Tx	25	28.4	697	32.6
Donor Age	0-5	2	2.3	33	1.5
	6-10	2	2.3	54	2.5
	11-17	11	12.5	449	21.0
	18-35	47	53.4	1104	51.7
	36-49	23	26.1	410	19.2
	50+	3	3.4	85	4.0
Donor Gender	Female	23	26.1	633	29.6
	Male	65	73.9	1502	70.4
Donor Race	White	36	40.9	1649	77.2
	Black	11	12.5	295	13.8
	Hispanic	40	45.5	166	7.8
	Asian	1	1.1	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	1	1.1	25	1.2
	6-10	0	0.0	25	1.2
	11-17	3	3.4	76	3.6
	18-35	22	25.0	440	20.6
	36-49	22	25.0	695	32.6
	50+	40	45.5	874	40.9
Recipient Gender	Female	47	53.4	1129	52.9
	Male	41	46.6	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	83	94.3	1948	91.2
	Black	3	3.4	85	4.0
	Hispanic	2	2.3	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	87	98.9	2062	96.6
	Yes	1	1.1	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	87	98.9	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	1.1	51	2.4
Medical Condition at Transplant	Not Hospitalized	77	87.5	1805	84.5
	Hospitalized	11	12.5	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	29	33.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	21	23.9	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	1.1	305	14.3
	Primary Pulmonary Hypertension	19	21.6	231	10.8
	Eisenmenger's Syndrome/Congenital	14	15.9	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	4	4.5	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	3	3.4	92	4.3
	1990	15	17.0	202	9.5
	1991	19	21.6	401	18.8
	1992	18	20.5	535	25.1
	1993	32	36.4	660	30.9
	1994	1	1.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	3	11.1	120	16.6
	> 2.5 - 3.0 hrs	2	7.4	106	14.6
	> 3.0 - 3.5 hrs	9	33.3	104	14.4
	> 3.5 - 4.0 hrs	10	37.0	211	29.1
	> 4.0 hrs	3	11.1	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	7	19.4	103	14.4
	> 2.5 - 3.0 hrs	3	8.3	95	13.3
	> 3.0 - 3.5 hrs	5	13.9	114	16.0
	> 3.5 - 4.0 hrs	14	38.9	218	30.5
	> 4.0 hrs	7	19.4	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	7	28.0	125	17.9
	> 3.5 - 4.5 hrs	10	40.0	145	20.8
	> 4.5 - 5.5 hrs	6	24.0	155	22.2
	> 5.5 - 6.5 hrs	1	4.0	126	18.1
	> 6.5 hrs	1	4.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	6	24.0	161	23.1
	> 3.5 - 4.5 hrs	11	44.0	165	23.7
	> 4.5 - 5.5 hrs	7	28.0	140	20.1
	> 5.5 - 6.5 hrs	1	4.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Mount Sinai Medical Center - New York NY
Provider Number 330024 (NYMS)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	88.6	5	80.0	91.4	7	7	1	85.7	90.6	-4.9	0.66
1 Year	2	50.0	64.7	5	80.0	73.7	7	7	2	71.4	71.1	0.3	0.99
Cond. [3] 3 Years	1	100.0	59.4				1	1	0	100.0	59.4	40.6	1.00
3 Years [3]		50.0	38.4										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	89.2	5	80.0	91.9	7	7.0	1.0	85.7	91.1	-5.4	0.61
1 Year	2	50.0	64.4	5	80.0	74.1	7	7.0	2.0	71.4	71.3	0.1	1.00
Cond. [3] 3 Years	1	100.0	61.6				1	1.0	0.0	100.0	61.6	38.4	1.00
3 Years [3]		50.0	39.7										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Mount Sinai Medical Center - New York NY
Provider Number 330024 (NYMS)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**7**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	3	42.9	724	33.9
	Single Right Lung Tx	3	42.9	714	33.4
	Double Lung Tx	1	14.3	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	42.9	449	21.0
	18-35	3	42.9	1104	51.7
	36-49	1	14.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	7	100.0	1502	70.4
Donor Race	White	2	28.6	1649	77.2
	Black	3	42.9	295	13.8
	Hispanic	2	28.6	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	14.3	440	20.6
	36-49	2	28.6	695	32.6
	50+	4	57.1	874	40.9
Recipient Gender	Female	4	57.1	1129	52.9
	Male	3	42.9	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	5	71.4	1948	91.2
	Black	1	14.3	85	4.0
	Hispanic	1	14.3	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	7	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	7	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	6	85.7	1805	84.5
	Hospitalized	1	14.3	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	28.6	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	42.9	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	14.3	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	14.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	2	28.6	535	25.1
	1993	3	42.9	660	30.9
	1994	2	28.6	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	33.3	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	2	66.7	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	33.3	218	30.5
	> 4.0 hrs	2	66.7	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	1	100.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	100.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Cleveland Clinic Foundation - Cleveland OH
Provider Number 360180 (OHCC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	28	71.4	85.3	37	86.5	89.9	65	65	13	80.0	87.9	-7.9	0.04*
1 Year	28	57.1	70.4	37	70.3	73.8	65	65	23	64.6	72.3	-7.7	0.14
Cond. [3] 3 Years	16	68.8	70.2				16	16	5	68.8	70.2	-1.4	0.90
3 Years [3]		39.3	49.4										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	28	71.4	86.0	37	86.5	90.4	65	65.0	13.0	80.0	88.5	-8.5	0.02*
1 Year	28	57.1	71.8	37	70.3	74.8	65	65.0	23.0	64.6	73.5	-8.9	0.09
Cond. [3] 3 Years	16	68.8	71.3				16	16.0	5.0	68.8	71.3	-2.5	0.82
3 Years [3]		39.3	51.2										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Cleveland Clinic Foundation - Cleveland OH
Provider Number 360180 (OHCC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**65**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	29	44.6	724	33.9
	Single Right Lung Tx	19	29.2	714	33.4
	Double Lung Tx	17	26.2	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	2	3.1	54	2.5
	11-17	10	15.4	449	21.0
	18-35	35	53.8	1104	51.7
	36-49	17	26.2	410	19.2
	50+	1	1.5	85	4.0
Donor Gender	Female	25	38.5	633	29.6
	Male	40	61.5	1502	70.4
Donor Race	White	57	87.7	1649	77.2
	Black	6	9.2	295	13.8
	Hispanic	1	1.5	166	7.8
	Asian	1	1.5	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	1.5	76	3.6
	18-35	16	24.6	440	20.6
	36-49	25	38.5	695	32.6
	50+	23	35.4	874	40.9
Recipient Gender	Female	33	50.8	1129	52.9
	Male	32	49.2	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	58	89.2	1948	91.2
	Black	5	7.7	85	4.0
	Hispanic	2	3.1	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	65	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	63	96.9	2004	93.9
	Yes	2	3.1	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	59	90.8	1805	84.5
	Hospitalized	3	4.6	180	8.4
	In ICU	3	4.6	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	18	27.7	710	33.3
	Fibrosis (Cystic/Idiopathic)	24	36.9	570	26.7
	Alpha-1-Antitrypsin Deficiency	6	9.2	305	14.3
	Primary Pulmonary Hypertension	6	9.2	231	10.8
	Eisenmenger's Syndrome/Congenital	4	6.2	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	7	10.8	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	5	7.7	202	9.5
	1991	18	27.7	401	18.8
	1992	19	29.2	535	25.1
	1993	21	32.3	660	30.9
	1994	2	3.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	14	48.3	120	16.6
	> 2.5 - 3.0 hrs	6	20.7	106	14.6
	> 3.0 - 3.5 hrs	5	17.2	104	14.4
	> 3.5 - 4.0 hrs	4	13.8	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	9	47.4	103	14.4
	> 2.5 - 3.0 hrs	2	10.5	95	13.3
	> 3.0 - 3.5 hrs	3	15.8	114	16.0
	> 3.5 - 4.0 hrs	4	21.1	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	1	5.3	19	2.7
Double Lung, Left	Up to 3.5 hrs	11	64.7	125	17.9
	> 3.5 - 4.5 hrs	5	29.4	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	1	5.9	28	4.0
Double Lung, Right	Up to 3.5 hrs	13	76.5	161	23.1
	> 3.5 - 4.5 hrs	3	17.6	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	1	5.9	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Integris Baptist Medical Center - Oklahoma City OK
Provider Number 370028 (OKBC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	7	85.7	90.7	10	100.0	92.2	17	17	1	94.1	91.6	2.6	0.70
1 Year	7	71.4	73.5	10	100.0	75.4	17	17	2	88.2	74.6	13.6	0.19
Cond. [3] 3 Years	5	60.0	77.6				5	5	2	60.0	77.6	-17.6	0.59
3 Years [3]		42.9	57.0										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	7	85.7	91.5	10	100.0	92.8	17	17.0	1.0	94.1	92.3	1.8	0.77
1 Year	7	71.4	74.8	10	100.0	76.4	17	17.0	2.0	88.2	75.7	12.5	0.22
Cond. [3] 3 Years	5	60.0	78.0				5	5.0	2.0	60.0	78.0	-18.0	0.59
3 Years [3]		42.9	58.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Integris Baptist Medical Center - Oklahoma City OK
Provider Number 370028 (OKBC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**17**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	5	29.4	724	33.9
	Single Right Lung Tx	11	64.7	714	33.4
	Double Lung Tx	1	5.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	17.6	449	21.0
	18-35	8	47.1	1104	51.7
	36-49	6	35.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	7	41.2	633	29.6
	Male	10	58.8	1502	70.4
Donor Race	White	11	64.7	1649	77.2
	Black	3	17.6	295	13.8
	Hispanic	3	17.6	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	4	23.5	695	32.6
	50+	13	76.5	874	40.9
Recipient Gender	Female	8	47.1	1129	52.9
	Male	9	52.9	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	16	94.1	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	1	5.9	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	17	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	17	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	15	88.2	1805	84.5
	Hospitalized	2	11.8	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	14	82.4	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	11.8	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	5.9	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	1	5.9	202	9.5
	1991	5	29.4	401	18.8
	1992	2	11.8	535	25.1
	1993	7	41.2	660	30.9
	1994	2	11.8	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	20.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	20.0	211	29.1
	> 4.0 hrs	3	60.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	9.1	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	3	27.3	114	16.0
	> 3.5 - 4.0 hrs	4	36.4	218	30.5
	> 4.0 hrs	3	27.3	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	100.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	100.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Oregon Health Sciences University Hospital - Portland OR
Provider Number 380009 (ORUO)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	92.6	5	100.0	87.3	6	6	0	100.0	88.2	11.8	0.36
1 Year	1	0.0	72.1	5	100.0	65.4	6	6	1	83.3	66.5	16.8	0.37
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	92.7	5	100.0	88.1	6	6.0	0.0	100.0	88.8	11.2	0.37
1 Year	1	0.0	71.5	5	100.0	65.7	6	6.0	1.0	83.3	66.7	16.7	0.37
Cond. [3] 3 Years													
3 Years [3]													

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Oregon Health Sciences University Hospital - Portland OR
Provider Number 380009 (ORUO)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**6**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	66.7	724	33.9
	Single Right Lung Tx	2	33.3	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	33.3	449	21.0
	18-35	4	66.7	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	33.3	633	29.6
	Male	4	66.7	1502	70.4
Donor Race	White	6	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	16.7	440	20.6
	36-49	2	33.3	695	32.6
	50+	3	50.0	874	40.9
Recipient Gender	Female	2	33.3	1129	52.9
	Male	4	66.7	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	6	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	5	83.3	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	1	16.7	9	0.4
On Ventilator at Transplant	No	4	66.7	2004	93.9
	Yes	2	33.3	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	3	50.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	3	50.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	50.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	2	33.3	535	25.1
	1993	3	50.0	660	30.9
	1994	1	16.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	2	50.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	25.0	211	29.1
	> 4.0 hrs	1	25.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	1	50.0	95	13.3
	> 3.0 - 3.5 hrs	1	50.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Allegheny General Hospital - Pittsburgh PA
Provider Number 390050 (PAAG)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	88.3	7	100.0	92.2	8	8	0	100.0	91.7	8.3	0.39
1 Year	1	100.0	67.8	7	85.7	76.3	8	8	1	87.5	75.2	12.3	0.41
Cond. [3] 3 Years	1	100.0	85.7				1	1	0	100.0	85.7	14.3	1.00
3 Years [3]		100.0	58.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	89.1	7	100.0	92.6	8	8.0	0.0	100.0	92.1	7.9	0.40
1 Year	1	100.0	69.1	7	85.7	77.2	8	8.0	1.0	87.5	76.2	11.3	0.45
Cond. [3] 3 Years	1	100.0	84.5				1	1.0	0.0	100.0	84.5	15.5	1.00
3 Years [3]		100.0	58.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Allegheny General Hospital - Pittsburgh PA
Provider Number 390050 (PAAG)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**8**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	6	75.0	724	33.9
	Single Right Lung Tx	2	25.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	6	75.0	1104	51.7
	36-49	2	25.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	5	62.5	633	29.6
	Male	3	37.5	1502	70.4
Donor Race	White	7	87.5	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	1	12.5	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	12.5	695	32.6
	50+	7	87.5	874	40.9
Recipient Gender	Female	5	62.5	1129	52.9
	Male	3	37.5	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	8	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	7	87.5	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	1	12.5	9	0.4
On Ventilator at Transplant	No	7	87.5	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	12.5	51	2.4
Medical Condition at Transplant	Not Hospitalized	7	87.5	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	1	12.5	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	4	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	25.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	25.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	3	37.5	535	25.1
	1993	4	50.0	660	30.9
	1994	1	12.5	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	1	16.7	104	14.4
	> 3.5 - 4.0 hrs	3	50.0	211	29.1
	> 4.0 hrs	2	33.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	1	50.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	1	50.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Allegheny General Hospital
320 East North Avenue, Pittsburgh, PA 15212
Provider Number 390050 (PAAG)

May 6, 1997

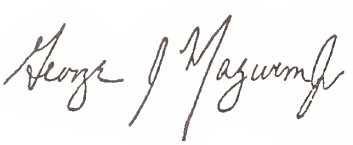
Allegheny General Hospital is a 728 bed tertiary care institution and serves as the Western Pennsylvania campus of The Allegheny University of the Health Sciences. The lung transplant program was initiated in February 1992. While the program was initiated five years ago, the volume of patients transplanted has remained very low.

As with most statistical analysis, the smaller the volume of patients involved, the greater the impact on the overall statistics when calculating patient and graft loss. However, despite this low volume, the graft and patient survival with this group is well above the expected rate. This is due to very careful patient selection, as well as close monitoring during all phases of transplantation.

Our statistics are indicative of the excellent quality of patient care offered.

However, statistical analysis should never be used as a sole measure of a transplant program's quality. Total patient care, with attention to both the emotional as well as the medical needs of the patient and family, is critical during all phases of evaluation, transplantation and follow-up. The multi-disciplinary team at Allegheny General Hospital addresses and coordinates all aspects of the patient's care.

George J. Magovern, Jr., MD
Transplant Program Director



Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Children's Hospital - Pittsburgh PA
Provider Number 393302 (PACH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	8	100.0	82.4	12	83.0	88.0	20	19	2	89.9	85.7	4.2	0.56
1 Year	8	75.0	68.7	12	36.8	69.3	20	19	9	52.8	69.1	-16.3	0.09
Cond. [3] 3 Years	6	63.9	69.6				6	5	2	63.9	69.6	-5.7	0.84
3 Years [3]		47.9	47.9										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	8	100.0	83.5	11	86.1	90.1	19	18.0	1.5	92.0	87.3	4.7	0.50
1 Year	8	75.0	70.9	11	40.4	74.1	19	18.0	8.0	55.7	72.7	-16.9	0.08
Cond. [3] 3 Years	6	63.9	72.1				6	5.0	2.0	63.9	72.1	-8.2	0.83
3 Years [3]		47.9	51.1										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Children's Hospital - Pittsburgh PA
Provider Number 393302 (PACH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**20**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	5.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	19	95.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	11	55.0	54	2.5
	11-17	7	35.0	449	21.0
	18-35	2	10.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	5	25.0	633	29.6
	Male	15	75.0	1502	70.4
Donor Race	White	15	75.0	1649	77.2
	Black	3	15.0	295	13.8
	Hispanic	1	5.0	166	7.8
	Asian	1	5.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	5	25.0	25	1.2
	11-17	13	65.0	76	3.6
	18-35	2	10.0	440	20.6
	36-49	0	0.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	13	65.0	1129	52.9
	Male	7	35.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	20	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	19	95.0	2062	96.6
	Yes	1	5.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	18	90.0	2004	93.9
	Yes	2	10.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	13	65.0	1805	84.5
	Hospitalized	5	25.0	180	8.4
	In ICU	2	10.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	5.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	11	55.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	5.0	231	10.8
	Eisenmenger's Syndrome/Congenital	3	15.0	96	4.5
	Retransplant	1	5.0	14	0.7
	Other	3	15.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	5.0	92	4.3
	1990	1	5.0	202	9.5
	1991	4	20.0	401	18.8
	1992	8	40.0	535	25.1
	1993	4	20.0	660	30.9
	1994	2	10.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	100.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	5.3	125	17.9
	> 3.5 - 4.5 hrs	1	5.3	145	20.8
	> 4.5 - 5.5 hrs	4	21.1	155	22.2
	> 5.5 - 6.5 hrs	8	42.1	126	18.1
	> 6.5 hrs	4	21.1	118	16.9
	Not Reported	1	5.3	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	5.3	161	23.1
	> 3.5 - 4.5 hrs	5	26.3	165	23.7
	> 4.5 - 5.5 hrs	3	15.8	140	20.1
	> 5.5 - 6.5 hrs	7	36.8	86	12.3
	> 6.5 hrs	2	10.5	99	14.2
	Not Reported	1	5.3	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Children's Hospital - Philadelphia PA
Provider Number 393303 (PACP)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	76.4				1	1	0	100.0	76.4	23.6	1.00
1 Year	1	0.0	30.4				1	1	1	0.0	30.4	-30.4	1.00
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/83-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	76.2				1	1.0	0.0	100.0	76.2	23.8	1.00
1 Year	1	0.0	29.6				1	1.0	1.0	0.0	29.6	-29.6	1.00
Cond. [3] 3 Years													
3 Years [3]													

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Children's Hospital - Philadelphia PA
Provider Number 393303 (PACP)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	0	0.0	724	33.9
	Single Right Lung Tx	1	100.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	1	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	100.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	0	0.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	0	0.0	2004	93.9
	Yes	1	100.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	0	0.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	1	100.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	100.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	1	100.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	100.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Pittsburgh Medical Center - Pittsburgh PA
Provider Number 390164 (PAPT)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	94	79.8	80.8	115	90.4	89.4	209	207	30	85.6	85.5	0.1	0.98
1 Year	94	61.7	65.7	115	75.8	73.5	209	204	63	69.3	69.9	-0.6	0.84
Cond. [3] 3 Years	58	79.0	78.1				58	53	12	79.0	78.1	1.0	0.85
3 Years [3]		48.8	51.3										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	88	82.1	82.5	114	91.0	90.2	199	196.5	25.5	87.1	86.9	0.2	0.91
1 Year	88	65.3	68.3	114	76.5	74.8	199	193.5	55.5	71.5	71.9	-0.4	0.89
Cond. [3] 3 Years	58	80.8	78.9				58	53.0	11.0	80.8	78.9	1.9	0.70
3 Years [3]		52.8	53.8										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Pittsburgh Medical Center - Pittsburgh PA
Provider Number 390164 (PAPT)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**209**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	60	28.7	724	33.9
	Single Right Lung Tx	58	27.8	714	33.4
	Double Lung Tx	91	43.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	46	22.0	449	21.0
	18-35	109	52.2	1104	51.7
	36-49	44	21.1	410	19.2
	50+	10	4.8	85	4.0
Donor Gender	Female	64	30.6	633	29.6
	Male	145	69.4	1502	70.4
Donor Race	White	168	80.4	1649	77.2
	Black	34	16.3	295	13.8
	Hispanic	4	1.9	166	7.8
	Asian	1	0.5	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	2	1.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	0.5	76	3.6
	18-35	58	27.8	440	20.6
	36-49	84	40.2	695	32.6
	50+	66	31.6	874	40.9
Recipient Gender	Female	117	56.0	1129	52.9
	Male	92	44.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	195	93.3	1948	91.2
	Black	8	3.8	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	1	0.5	17	0.8
	Other	5	2.4	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	197	94.3	2062	96.6
	Yes	12	5.7	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	181	86.6	2004	93.9
	Yes	8	3.8	80	3.7
	Not Reported	20	9.6	51	2.4
Medical Condition at Transplant	Not Hospitalized	173	82.8	1805	84.5
	Hospitalized	19	9.1	180	8.4
	In ICU	13	6.2	141	6.6
	Not Reported	4	1.9	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	58	27.8	710	33.3
	Fibrosis (Cystic/Idiopathic)	51	24.4	570	26.7
	Alpha-1-Antitrypsin Deficiency	27	12.9	305	14.3
	Primary Pulmonary Hypertension	22	10.5	231	10.8
	Eisenmenger's Syndrome/Congenital	20	9.6	96	4.5
	Retransplant	1	0.5	14	0.7
	Other	30	14.4	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	5	2.4	33	1.5
	1989	4	1.9	92	4.3
	1990	13	6.2	202	9.5
	1991	54	25.8	401	18.8
	1992	55	26.3	535	25.1
	1993	63	30.1	660	30.9
	1994	15	7.2	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	3.3	120	16.6
	> 2.5 - 3.0 hrs	5	8.3	106	14.6
	> 3.0 - 3.5 hrs	4	6.7	104	14.4
	> 3.5 - 4.0 hrs	14	23.3	211	29.1
	> 4.0 hrs	31	51.7	166	22.9
	Not Reported	4	6.7	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	3.4	103	14.4
	> 2.5 - 3.0 hrs	2	3.4	95	13.3
	> 3.0 - 3.5 hrs	3	5.2	114	16.0
	> 3.5 - 4.0 hrs	20	34.5	218	30.5
	> 4.0 hrs	25	43.1	165	23.1
	Not Reported	6	10.3	19	2.7
Double Lung, Left	Up to 3.5 hrs	10	11.0	125	17.9
	> 3.5 - 4.5 hrs	13	14.3	145	20.8
	> 4.5 - 5.5 hrs	20	22.0	155	22.2
	> 5.5 - 6.5 hrs	16	17.6	126	18.1
	> 6.5 hrs	26	28.6	118	16.9
	Not Reported	6	6.6	28	4.0
Double Lung, Right	Up to 3.5 hrs	7	7.7	161	23.1
	> 3.5 - 4.5 hrs	18	19.8	165	23.7
	> 4.5 - 5.5 hrs	20	22.0	140	20.1
	> 5.5 - 6.5 hrs	14	15.4	86	12.3
	> 6.5 hrs	9	9.9	99	14.2
	Not Reported	23	25.3	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Temple University Hospital - Philadelphia PA
Provider Number 390027 (PATU)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				3	100.0	89.2	3	3	0	100.0	89.2	10.8	1.00
1 Year				3	100.0	67.9	3	3	0	100.0	67.9	32.1	0.56
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				3	100.0	89.6	3	3.0	0.0	100.0	89.6	10.4	1.00
1 Year				3	100.0	68.5	3	3.0	0.0	100.0	68.5	31.5	0.56
Cond. [3] 3 Years													
3 Years [3]													

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Temple University Hospital - Philadelphia PA
Provider Number 390027 (PATU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**3**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	0	0.0	724	33.9
	Single Right Lung Tx	1	33.3	714	33.4
	Double Lung Tx	2	66.7	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	33.3	449	21.0
	18-35	1	33.3	1104	51.7
	36-49	1	33.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	66.7	633	29.6
	Male	1	33.3	1502	70.4
Donor Race	White	3	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	33.3	695	32.6
	50+	2	66.7	874	40.9
Recipient Gender	Female	3	100.0	1129	52.9
	Male	0	0.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	3	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	3	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	3	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	2	66.7	1805	84.5
	Hospitalized	1	33.3	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	33.3	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	33.3	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	33.3	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	3	100.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	1	100.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	1	50.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	1	50.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	50.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	1	50.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Hospital of University of Pennsylvania - Philadelphia PA
Provider Number 390111 (PAUP)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	40.0	74.7	51	74.5	89.0	56	56	16	71.4	87.8	-16.3	<0.01*
1 Year	5	40.0	53.1	51	58.8	74.8	56	56	24	57.1	72.9	-15.7	<0.01*
Cond. [3] 3 Years	2	100.0	81.0				2	2	0	100.0	81.0	19.0	1.00
3 Years [3]		40.0	43.0										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	50.0	77.4	50	76.0	89.7	54	54.0	14.0	74.1	88.8	-14.7	<0.01*
1 Year	4	50.0	57.4	50	60.0	75.7	54	54.0	22.0	59.3	74.3	-15.1	<0.01*
Cond. [3] 3 Years	2	100.0	81.3				2	2.0	0.0	100.0	81.3	18.7	1.00
3 Years [3]		50.0	46.7										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Hospital of University of Pennsylvania - Philadelphia PA
Provider Number 390111 (PAUP)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**56**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	14	25.0	724	33.9
	Single Right Lung Tx	21	37.5	714	33.4
	Double Lung Tx	21	37.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	10	17.9	449	21.0
	18-35	26	46.4	1104	51.7
	36-49	15	26.8	410	19.2
	50+	5	8.9	85	4.0
Donor Gender	Female	17	30.4	633	29.6
	Male	39	69.6	1502	70.4
Donor Race	White	43	76.8	1649	77.2
	Black	10	17.9	295	13.8
	Hispanic	1	1.8	166	7.8
	Asian	2	3.6	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	9	16.1	440	20.6
	36-49	15	26.8	695	32.6
	50+	32	57.1	874	40.9
Recipient Gender	Female	32	57.1	1129	52.9
	Male	24	42.9	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	51	91.1	1948	91.2
	Black	4	7.1	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	1	1.8	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	54	96.4	2062	96.6
	Yes	2	3.6	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	52	92.9	2004	93.9
	Yes	4	7.1	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	43	76.8	1805	84.5
	Hospitalized	2	3.6	180	8.4
	In ICU	11	19.6	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	28	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	5	8.9	570	26.7
	Alpha-1-Antitrypsin Deficiency	4	7.1	305	14.3
	Primary Pulmonary Hypertension	12	21.4	231	10.8
	Eisenmenger's Syndrome/Congenital	3	5.4	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	4	7.1	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	3	5.4	401	18.8
	1992	12	21.4	535	25.1
	1993	30	53.6	660	30.9
	1994	11	19.6	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	14.3	120	16.6
	> 2.5 - 3.0 hrs	1	7.1	106	14.6
	> 3.0 - 3.5 hrs	3	21.4	104	14.4
	> 3.5 - 4.0 hrs	7	50.0	211	29.1
	> 4.0 hrs	1	7.1	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	4	19.0	95	13.3
	> 3.0 - 3.5 hrs	3	14.3	114	16.0
	> 3.5 - 4.0 hrs	8	38.1	218	30.5
	> 4.0 hrs	6	28.6	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	4.8	125	17.9
	> 3.5 - 4.5 hrs	6	28.6	145	20.8
	> 4.5 - 5.5 hrs	7	33.3	155	22.2
	> 5.5 - 6.5 hrs	5	23.8	126	18.1
	> 6.5 hrs	2	9.5	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	6	28.6	161	23.1
	> 3.5 - 4.5 hrs	7	33.3	165	23.7
	> 4.5 - 5.5 hrs	2	9.5	140	20.1
	> 5.5 - 6.5 hrs	1	4.8	86	12.3
	> 6.5 hrs	5	23.8	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Hospital of the University of Pennsylvania
3400 Spruce Street, Philadelphia, PA 19104
Provider Number 390111 (PAUP)

May 5, 1997

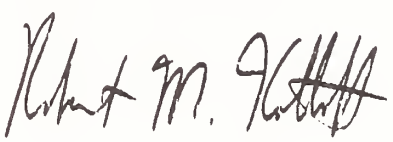
The lung transplantation program at the Hospital of the University of Pennsylvania was established in July of 1991. From inception to April 30, 1994 54 patients underwent lung transplant procedures with a one month survival rate of 74.1% and a one year survival rate of 59.3%.

These survival rates fall somewhat below anticipated outcomes. We believe however that our outcomes during this period reflected a commitment to high risk patient populations. For example, during this time over one quarter of our transplant procedures were performed on patients with pulmonary vascular disease, a high risk patient population acknowledged to have outcomes inferior to those of other disease states. The percentage of patients undergoing transplantation at Penn for pulmonary vascular disease was nearly twice that of the national average. Similarly, we were committed to serving older patients, with nearly 60% of our transplant recipients exceeding the age of 50 compared to a national average of 40% exceeding this age.

Most importantly, our outcomes have continued to improve to the present time, while maintaining our commitment to serve high risk patient populations. Since April 1994, we have performed an additional 98 transplant procedures with a one month survival of 84% and a one year survival of 71%. In recognition of our extensive experience and excellent outcomes, we have recently been designated by the Health Care Finance Administration as a Medicare approved lung transplant center, joining an elite group of centers nationwide.

We remain strongly committed to providing outstanding, comprehensive care to patients with advanced lung disease awaiting transplantation as well as to lung transplant recipients. We are extremely proud of our accomplishments and believe that our program has emerged as one of the finest and most experienced in the United States.

Robert Kotloff, MD
Medical Director, Lung Transplant Program



Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Medical University of South Carolina - Charleston SC
Provider Number 420004 (SCMU)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				2	50.0	92.7	2	2	1	50.0	92.7	-42.7	0.14
1 Year				2	50.0	79.5	2	2	1	50.0	79.5	-29.5	0.37
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				2	50.0	93.3	2	2.0	1.0	50.0	93.3	-43.3	0.13
1 Year				2	50.0	80.3	2	2.0	1.0	50.0	80.3	-30.3	0.36
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Medical University of South Carolina - Charleston SC
Provider Number 420004 (SCMU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**2**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	50.0	724	33.9
	Single Right Lung Tx	1	50.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	2	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	1	50.0	633	29.6
	Male	1	50.0	1502	70.4
Donor Race	White	1	50.0	1649	77.2
	Black	1	50.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	50.0	695	32.6
	50+	1	50.0	874	40.9
Recipient Gender	Female	2	100.0	1129	52.9
	Male	0	0.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	2	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	2	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	2	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	2	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	50.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	2	100.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	100.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	100.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Baptist Memorial Hospital - Memphis TN
Provider Number 440048 (TNBM)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	80.0	88.8	4	75.0	89.8	9	9	2	77.8	89.3	-11.5	0.26
1 Year	5	40.0	68.3	4	50.0	68.8	9	9	5	44.4	68.5	-24.1	0.11
Cond. [3] 3 Years	2	100.0	71.9				2	2	0	100.0	71.9	28.1	1.00
3 Years [3]		40.0	49.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	80.0	89.5	4	75.0	90.1	9	9.0	2.0	77.8	89.8	-12.0	0.23
1 Year	5	40.0	68.9	4	50.0	69.3	9	9.0	5.0	44.4	69.1	-24.6	0.10
Cond. [3] 3 Years	2	100.0	73.9				2	2.0	0.0	100.0	73.9	26.1	1.00
3 Years [3]		40.0	50.9										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Baptist Memorial Hospital - Memphis TN
Provider Number 440048 (TNBM)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**9**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	6	66.7	724	33.9
	Single Right Lung Tx	2	22.2	714	33.4
	Double Lung Tx	1	11.1	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	1	11.1	54	2.5
	11-17	4	44.4	449	21.0
	18-35	4	44.4	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	22.2	633	29.6
	Male	7	77.8	1502	70.4
Donor Race	White	4	44.4	1649	77.2
	Black	4	44.4	295	13.8
	Hispanic	1	11.1	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	22.2	440	20.6
	36-49	3	33.3	695	32.6
	50+	4	44.4	874	40.9
Recipient Gender	Female	7	77.8	1129	52.9
	Male	2	22.2	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	7	77.8	1948	91.2
	Black	2	22.2	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	9	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	9	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	8	88.9	1805	84.5
	Hospitalized	1	11.1	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	22.2	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	33.3	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	11.1	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	1	11.1	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	22.2	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	2	22.2	401	18.8
	1992	5	55.6	535	25.1
	1993	2	22.2	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	16.7	106	14.6
	> 3.0 - 3.5 hrs	1	16.7	104	14.4
	> 3.5 - 4.0 hrs	3	50.0	211	29.1
	> 4.0 hrs	1	16.7	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	50.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	1	50.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	1	100.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	100.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Vanderbilt University Medical Center - Nashville TN
Provider Number 440039 (TNVU)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	17	94.1	82.7	16	81.3	89.9	33	33	4	87.9	86.2	1.7	0.77
1 Year	17	88.2	64.7	16	62.5	73.4	33	33	8	75.8	68.9	6.9	0.37
Cond. [3] 3 Years	15	73.3	73.5				15	15	4	73.3	73.5	-0.1	0.99
3 Years [3]		64.7	47.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	15	96.7	83.9	16	81.3	90.3	31	31.0	3.5	88.7	87.2	1.5	0.79
1 Year	15	96.7	68.1	16	62.5	73.7	31	31.0	6.5	79.0	71.0	8.0	0.30
Cond. [3] 3 Years	15	76.7	74.6				15	15.0	3.5	76.7	74.6	2.0	0.85
3 Years [3]		74.1	50.8										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Vanderbilt University Medical Center - Nashville TN
Provider Number 440039 (TNVU)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**33**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	15	45.5	724	33.9
	Single Right Lung Tx	16	48.5	714	33.4
	Double Lung Tx	2	6.1	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	1	3.0	54	2.5
	11-17	5	15.2	449	21.0
	18-35	16	48.5	1104	51.7
	36-49	9	27.3	410	19.2
	50+	2	6.1	85	4.0
Donor Gender	Female	9	27.3	633	29.6
	Male	24	72.7	1502	70.4
Donor Race	White	30	90.9	1649	77.2
	Black	3	9.1	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	3.0	76	3.6
	18-35	3	9.1	440	20.6
	36-49	11	33.3	695	32.6
	50+	18	54.5	874	40.9
Recipient Gender	Female	13	39.4	1129	52.9
	Male	20	60.6	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	33	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	31	93.9	2062	96.6
	Yes	2	6.1	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	31	93.9	2004	93.9
	Yes	2	6.1	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	30	90.9	1805	84.5
	Hospitalized	1	3.0	180	8.4
	In ICU	2	6.1	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	12	36.4	710	33.3
	Fibrosis (Cystic/Idiopathic)	9	27.3	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	9.1	305	14.3
	Primary Pulmonary Hypertension	5	15.2	231	10.8
	Eisenmenger's Syndrome/Congenital	1	3.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	3	9.1	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	5	15.2	202	9.5
	1991	9	27.3	401	18.8
	1992	9	27.3	535	25.1
	1993	8	24.2	660	30.9
	1994	2	6.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	5	33.3	120	16.6
	> 2.5 - 3.0 hrs	2	13.3	106	14.6
	> 3.0 - 3.5 hrs	3	20.0	104	14.4
	> 3.5 - 4.0 hrs	5	33.3	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	5	31.3	103	14.4
	> 2.5 - 3.0 hrs	2	12.5	95	13.3
	> 3.0 - 3.5 hrs	4	25.0	114	16.0
	> 3.5 - 4.0 hrs	3	18.8	218	30.5
	> 4.0 hrs	2	12.5	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	2	100.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	50.0	165	23.7
	> 4.5 - 5.5 hrs	1	50.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University Hospital - San Antonio TX
Provider Number 450213 (TXBC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	62	87.1	81.6	28	92.9	91.8	90	90	10	88.9	84.8	4.1	0.22
1 Year	62	59.7	65.7	28	74.7	75.4	90	89	32	64.3	68.7	-4.4	0.32
Cond. [3] 3 Years	37	57.2	71.7				37	34	15	57.2	71.7	-14.5	0.04*
3 Years [3]		34.1	47.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	59	87.3	82.8	28	92.9	92.2	87	87.0	9.5	89.1	85.8	3.3	0.33
1 Year	59	61.0	67.5	28	74.7	75.9	87	86.0	30.0	65.4	70.2	-4.8	0.28
Cond. [3] 3 Years	37	57.2	72.8				37	34.0	15.0	57.2	72.8	-15.6	0.03*
3 Years [3]		34.9	49.2										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University Hospital - San Antonio TX
Provider Number 450213 (TXBC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**90**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	35	38.9	724	33.9
	Single Right Lung Tx	51	56.7	714	33.4
	Double Lung Tx	4	4.4	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	23	25.6	449	21.0
	18-35	51	56.7	1104	51.7
	36-49	15	16.7	410	19.2
	50+	1	1.1	85	4.0
Donor Gender	Female	17	18.9	633	29.6
	Male	73	81.1	1502	70.4
Donor Race	White	73	81.1	1649	77.2
	Black	4	4.4	295	13.8
	Hispanic	11	12.2	166	7.8
	Asian	0	0.0	14	0.7
	Other	2	2.2	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	12	13.3	440	20.6
	36-49	30	33.3	695	32.6
	50+	48	53.3	874	40.9
Recipient Gender	Female	43	47.8	1129	52.9
	Male	47	52.2	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	73	81.1	1948	91.2
	Black	4	4.4	85	4.0
	Hispanic	13	14.4	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	87	96.7	2062	96.6
	Yes	3	3.3	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	86	95.6	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	4	4.4	51	2.4
Medical Condition at Transplant	Not Hospitalized	84	93.3	1805	84.5
	Hospitalized	4	4.4	180	8.4
	In ICU	2	2.2	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	28	31.1	710	33.3
	Fibrosis (Cystic/Idiopathic)	21	23.3	570	26.7
	Alpha-1-Antitrypsin Deficiency	22	24.4	305	14.3
	Primary Pulmonary Hypertension	5	5.6	231	10.8
	Eisenmenger's Syndrome/Congenital	1	1.1	96	4.5
	Retransplant	1	1.1	14	0.7
	Other	12	13.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	2	2.2	33	1.5
	1989	13	14.4	92	4.3
	1990	22	24.4	202	9.5
	1991	18	20.0	401	18.8
	1992	15	16.7	535	25.1
	1993	14	15.6	660	30.9
	1994	6	6.7	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	6	17.1	120	16.6
	> 2.5 - 3.0 hrs	8	22.9	106	14.6
	> 3.0 - 3.5 hrs	7	20.0	104	14.4
	> 3.5 - 4.0 hrs	10	28.6	211	29.1
	> 4.0 hrs	4	11.4	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	8	15.7	103	14.4
	> 2.5 - 3.0 hrs	7	13.7	95	13.3
	> 3.0 - 3.5 hrs	17	33.3	114	16.0
	> 3.5 - 4.0 hrs	9	17.6	218	30.5
	> 4.0 hrs	10	19.6	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	2	50.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	2	50.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	2	50.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	1	25.0	140	20.1
	> 5.5 - 6.5 hrs	1	25.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Hermann Hospital - Houston TX
Provider Number 450068 (TXHH)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				1	100.0	90.1	1	1	0	100.0	90.1	9.9	1.00
1 Year				1	100.0	71.6	1	1	0	100.0	71.6	28.4	1.00
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				1	100.0	90.6	1	1.0	0.0	100.0	90.6	9.4	1.00
1 Year				1	100.0	72.7	1	1.0	0.0	100.0	72.7	27.3	1.00
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Hermann Hospital - Houston TX
Provider Number 450068 (TXHH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	100.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	1	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	0	0.0	695	32.6
	50+	1	100.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	1	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	0	0.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	1	100.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	100.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	1	100.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	100.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for San Antonio Community Hospital - San Antonio TX
Provider Number 450631 (TXHS)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	82.0				1	1	1	0.0	82.0	-82.0	0.18
1 Year	1	0.0	64.1				1	1	1	0.0	64.1	-64.1	0.36
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	82.7				1	1.0	1.0	0.0	82.7	-82.7	0.17
1 Year	1	0.0	63.2				1	1.0	1.0	0.0	63.2	-63.2	0.37
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

San Antonio Community Hospital - San Antonio TX
Provider Number 450631 (TXHS)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**1**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	100.0	724	33.9
	Single Right Lung Tx	0	0.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	1	100.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	1	100.0	1502	70.4
Donor Race	White	0	0.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	1	100.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	0	0.0	695	32.6
	50+	1	100.0	874	40.9
Recipient Gender	Female	1	100.0	1129	52.9
	Male	0	0.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	1	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	1	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	1	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	1	100.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	1	100.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	0	0.0	535	25.1
	1993	0	0.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	100.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for The Methodist Hospital - Houston TX
Provider Number 450358 (TXMH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	31	87.1	77.2	27	92.6	87.8	58	58	6	89.7	82.1	7.5	0.10
1 Year	31	51.6	59.8	27	63.0	67.5	58	58	25	56.9	63.4	-6.5	0.26
Cond. [3] 3 Years	16	43.8	71.9				16	16	9	43.8	71.9	-28.1	<0.01*
3 Years [3]		22.6	42.9										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	25	85.7	78.4	27	92.5	88.2	51	51.0	5.5	89.2	83.5	5.7	0.23
1 Year	25	59.2	62.3	27	64.2	68.5	51	51.0	19.5	61.8	65.6	-3.8	0.53
Cond. [3] 3 Years	16	43.8	72.8				16	16.0	9.0	43.8	72.8	-29.1	<0.01*
3 Years [3]		25.9	45.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

The Methodist Hospital - Houston TX
Provider Number 450358 (TXMH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**58**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	21	36.2	724	33.9
	Single Right Lung Tx	12	20.7	714	33.4
	Double Lung Tx	25	43.1	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	17	29.3	449	21.0
	18-35	29	50.0	1104	51.7
	36-49	11	19.0	410	19.2
	50+	1	1.7	85	4.0
Donor Gender	Female	19	32.8	633	29.6
	Male	39	67.2	1502	70.4
Donor Race	White	45	77.6	1649	77.2
	Black	4	6.9	295	13.8
	Hispanic	9	15.5	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	1.7	76	3.6
	18-35	9	15.5	440	20.6
	36-49	36	62.1	695	32.6
	50+	12	20.7	874	40.9
Recipient Gender	Female	29	50.0	1129	52.9
	Male	29	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	50	86.2	1948	91.2
	Black	4	6.9	85	4.0
	Hispanic	4	6.9	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	48	82.8	2062	96.6
	Yes	10	17.2	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	56	96.6	2004	93.9
	Yes	2	3.4	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	44	75.9	1805	84.5
	Hospitalized	9	15.5	180	8.4
	In ICU	5	8.6	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	9	15.5	710	33.3
	Fibrosis (Cystic/Idiopathic)	27	46.6	570	26.7
	Alpha-1-Antitrypsin Deficiency	7	12.1	305	14.3
	Primary Pulmonary Hypertension	2	3.4	231	10.8
	Eisenmenger's Syndrome/Congenital	3	5.2	96	4.5
	Retransplant	2	3.4	14	0.7
	Other	8	13.8	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	3	5.2	33	1.5
	1989	6	10.3	92	4.3
	1990	5	8.6	202	9.5
	1991	10	17.2	401	18.8
	1992	16	27.6	535	25.1
	1993	15	25.9	660	30.9
	1994	3	5.2	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	7	33.3	120	16.6
	> 2.5 - 3.0 hrs	5	23.8	106	14.6
	> 3.0 - 3.5 hrs	1	4.8	104	14.4
	> 3.5 - 4.0 hrs	5	23.8	211	29.1
	> 4.0 hrs	2	9.5	166	22.9
	Not Reported	1	4.8	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	16.7	103	14.4
	> 2.5 - 3.0 hrs	4	33.3	95	13.3
	> 3.0 - 3.5 hrs	1	8.3	114	16.0
	> 3.5 - 4.0 hrs	3	25.0	218	30.5
	> 4.0 hrs	2	16.7	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	14	56.0	125	17.9
	> 3.5 - 4.5 hrs	3	12.0	145	20.8
	> 4.5 - 5.5 hrs	6	24.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	2	8.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	12	48.0	161	23.1
	> 3.5 - 4.5 hrs	3	12.0	165	23.7
	> 4.5 - 5.5 hrs	6	24.0	140	20.1
	> 5.5 - 6.5 hrs	1	4.0	86	12.3
	> 6.5 hrs	1	4.0	99	14.2
	Not Reported	2	8.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: The Methodist Hospital
6565 Fannin Street, Houston, TX 77030
Provider Number 450358 (TXMH)

May 15, 1997

The Methodist Hospital/Baylor College of Medicine Multi-organ Transplant Center (TMH/BCM MOTC) was established in 1984 to create the optimal environment for solid organ and tissue transplantation. The Transplant Center is a unique organization that spans departmental and section lines, allowing efficient utilization of necessary personnel, Hospital, and College resources. Our mission is to provide the highest quality of care to patients being evaluated for, or receiving, organ and tissue transplantation. As a proactive medical facility, we are also committed to research, and remain dedicated to advancing the art and science of organ and tissue transplantation by performing clinical and basic research relevant to organ and tissue transplantation, as well as educating physicians and other health care personnel in transplantation.

TMH/BCM MOTC currently maintains active heart, heart-lung, lung, kidney, and pancreas programs. The lung program was established in 1985. Prior to that time, lung transplants were rarely performed. TMH/BCM MOTC became a landmark center for lung transplantation, performing the first successful heart-lung transplant (1985), the first successful single lung transplant in the United States (1987), the first double lung transplant in the United States (1987), and the first successful heart-lung transplant in Texas for a cystic fibrosis patient (1989).

According to UNOS, TMH/BCM MOTC had an actual graft survival rate of 56.9 percent at one year. The expected graft survival rate at one year was 63.4. This was calculated from a statistical risk model based on national data. There are many variables that make comparative analysis difficult, and we caution the public in utilizing these survival rates to decide where they receive medical treatment. A variety of medical factors have influenced graft and patient survival at TMH/BCM MOTC. Quality of care may not be reflected in the survival rates of a transplant program; the survival data only reflect whether a transplant program is different from the average.

Patients should always talk with their physician about their options when deciding upon a transplant facility which will best meet their needs. We are confident in our program, and the level of expertise and excellence that we allow our patients. We welcome your further investigation of our program, and will be happy to discuss your individual circumstances and how our program can address those needs.

Adaani Frost, M.D.
Program Director

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for St Paul Medical Center - Dallas TX
Provider Number 450044 (TXSP)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	50.0	84.3	3	100.0	91.0	5	5	1	80.0	88.3	-8.3	0.46
1 Year	2	0.0	61.5	3	66.7	73.1	5	5	3	40.0	68.5	-28.5	0.33
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	50.0	85.6	3	100.0	91.3	5	5.0	1.0	80.0	89.0	-9.0	0.44
1 Year	2	0.0	62.5	3	66.7	74.1	5	5.0	3.0	40.0	69.4	-29.4	0.33
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

St Paul Medical Center - Dallas TX
Provider Number 450044 (TXSP)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**5**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	20.0	724	33.9
	Single Right Lung Tx	4	80.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	60.0	449	21.0
	18-35	2	40.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	40.0	633	29.6
	Male	3	60.0	1502	70.4
Donor Race	White	3	60.0	1649	77.2
	Black	1	20.0	295	13.8
	Hispanic	1	20.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	1	20.0	695	32.6
	50+	4	80.0	874	40.9
Recipient Gender	Female	2	40.0	1129	52.9
	Male	3	60.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	5	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	5	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	5	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	5	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	40.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	40.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	20.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	1	20.0	202	9.5
	1991	1	20.0	401	18.8
	1992	1	20.0	535	25.1
	1993	2	40.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	1	100.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	25.0	114	16.0
	> 3.5 - 4.0 hrs	2	50.0	218	30.5
	> 4.0 hrs	1	25.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Baylor University Medical Center - Dallas TX
Provider Number 450021 (TXTX)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	100.0	88.6	14	78.6	90.4	18	18	3	83.3	90.0	-6.7	0.33
1 Year	4	25.0	73.4	14	57.1	73.3	18	18	9	50.0	73.3	-23.3	0.02*
Cond. [3] 3 Years	1	100.0	74.2				1	1	0	100.0	74.2	25.8	1.00
3 Years [3]		25.0	54.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	4	100.0	89.3	14	78.6	90.9	18	18.0	3.0	83.3	90.5	-7.2	0.29
1 Year	4	25.0	74.8	14	57.1	73.3	18	18.0	9.0	50.0	73.6	-23.6	0.02*
Cond. [3] 3 Years	1	100.0	75.2				1	1.0	0.0	100.0	75.2	24.8	1.00
3 Years [3]		25.0	56.3										

Notes:
1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.
2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.
3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.
4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.
5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Baylor University Medical Center - Dallas TX
Provider Number 450021 (TXTX)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**18**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	7	38.9	724	33.9
	Single Right Lung Tx	8	44.4	714	33.4
	Double Lung Tx	3	16.7	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	4	22.2	449	21.0
	18-35	12	66.7	1104	51.7
	36-49	2	11.1	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	5	27.8	633	29.6
	Male	13	72.2	1502	70.4
Donor Race	White	10	55.6	1649	77.2
	Black	6	33.3	295	13.8
	Hispanic	2	11.1	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	5.6	440	20.6
	36-49	3	16.7	695	32.6
	50+	14	77.8	874	40.9
Recipient Gender	Female	10	55.6	1129	52.9
	Male	8	44.4	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	16	88.9	1948	91.2
	Black	1	5.6	85	4.0
	Hispanic	1	5.6	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	18	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	18	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	18	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	9	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	16.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	16.7	305	14.3
	Primary Pulmonary Hypertension	2	11.1	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	5.6	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	2	11.1	202	9.5
	1991	2	11.1	401	18.8
	1992	5	27.8	535	25.1
	1993	4	22.2	660	30.9
	1994	5	27.8	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	28.6	120	16.6
	> 2.5 - 3.0 hrs	1	14.3	106	14.6
	> 3.0 - 3.5 hrs	1	14.3	104	14.4
	> 3.5 - 4.0 hrs	3	42.9	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	12.5	114	16.0
	> 3.5 - 4.0 hrs	4	50.0	218	30.5
	> 4.0 hrs	3	37.5	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	33.3	125	17.9
	> 3.5 - 4.5 hrs	1	33.3	145	20.8
	> 4.5 - 5.5 hrs	1	33.3	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	33.3	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	1	33.3	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	1	33.3	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: Baylor University Medical Center
3500 Gaston Avenue, Dallas, TX 75246
Provider Number 450021 (TXTX)

May 9, 1997

Baylor University Medical Center has a reputation for excellence in the field of solid organ transplantation. As a transplant center, we have dedicated tremendous resources to achievements in this field.

Our lung transplant program was in the early stages of development in the era being reported for these center specific survival rates and our results were inconsistent as we developed experience in this arena. The data demonstrate a consistent trend toward ever increasing survival results, a trend which has placed us in recent years at or beyond the expected rate.

Under new leadership provided by myself and Dr. Ken Ausloos, the Medical Director of Lung Transplantation, we are experiencing both growth in the volume of lung transplants performed and excellent survival results. In past years with a low volume, a single adverse event can appear statistically significant, but is not always an accurate measure of the clinical ability of the program. For example, if the very earliest years of the program when lung transplantation was still a new clinical procedure and adverse events occurred frequently were eliminated, our survival rates from 1993 forward meet the national benchmarks. Therefore, we urge you to use caution in evaluating a center on these numbers alone and encourage you to review the more recent numbers. The survival rates for the most recent years, 1994 - 1997, are available by calling Baylor University Medical Center.

We look forward to continued growth and development in our lung transplant program and to serving our patients with excellence and compassion.

W. Steves Ring, M.D.
Director, Heart and Lung Transplant Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Utah Medical Center - Salt Lake City UT
Provider Number 460009 (UTMC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				4	75.0	86.3	4	4	1	75.0	86.3	-11.3	0.44
1 Year				4	75.0	70.1	4	4	1	75.0	70.1	4.9	1.00
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month				4	75.0	87.0	4	4.0	1.0	75.0	87.0	-12.0	0.43
1 Year				4	75.0	70.9	4	4.0	1.0	75.0	70.9	4.1	1.00
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Utah Medical Center - Salt Lake City UT
Provider Number 460009 (UTMC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**4**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	50.0	724	33.9
	Single Right Lung Tx	2	50.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	3	75.0	449	21.0
	18-35	1	25.0	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	3	75.0	633	29.6
	Male	1	25.0	1502	70.4
Donor Race	White	4	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	2	50.0	695	32.6
	50+	2	50.0	874	40.9
Recipient Gender	Female	1	25.0	1129	52.9
	Male	3	75.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	4	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	4	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	3	75.0	2004	93.9
	Yes	1	25.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	3	75.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	1	25.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	75.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	25.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	1	25.0	535	25.1
	1993	3	75.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	100.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	2	100.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: University of Utah Medical Center
50 North Medical Drive, Salt Lake City, UT 84132
Provider Number 460009 (UTMC)

May 14,1997

The University of Utah Lung Transplant Program was initiated in 1992 to provide service to patients in need of lung or heart-lung transplantation throughout the Intermountain West. The University Hospital is the sole provider of lung and heart-lung transplantation services in the state. The Lung Transplant Program consists of an integrated, multidisciplinary, interdepartmental team of specialists including cardiothoracic surgeons, pulmonary transplant physicians, lung transplant coordinators, pulmonary rehabilitation specialists, and social services specialists.

Since its inception in 1992, the University of Utah's Lung Transplant Program has grown steadily. From August of 1992 through April of 1994, the first four lung transplant surgeries were performed at the University Hospital. The overall survival rate for this group of patients was 75% at one month and 75% at one year. One patient died in the immediate post operative period of hyperacute rejection. As indicated by the UNOS statistics, our one year survival rate during the 1992-1994 period is above the national average.

The success in the University of Utah's Lung Transplant Program is reflected in the steady growth of the program, our high level of patient satisfaction, and the continued improvement in survival rates among our lung transplant recipients. We believe our present success reflects the hard work and commitment of a dedicated comprehensive multidisciplinary team of transplant specialists focused on providing the best lung transplant services to the people of the Intermountain West.

Barbara C. Cahill, M.D.
Medical Director, Lung Transplantation
University of Utah

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Inova Fairfax Hospital - Falls Church VA
Provider Number 490063 (VAFH)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	89.5	4	100.0	93.4	6	6	0	100.0	92.1	7.9	0.46
1 Year	2	50.0	73.5	4	75.0	80.0	6	6	2	66.7	77.8	-11.2	0.50
Cond. [3] 3 Years	1	100.0	72.8				1	1	0	100.0	72.8	27.2	1.00
3 Years [3]		50.0	53.5										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	90.1	4	100.0	93.8	6	6.0	0.0	100.0	92.5	7.5	0.48
1 Year	2	50.0	74.0	4	75.0	80.6	6	6.0	2.0	66.7	78.4	-11.7	0.48
Cond. [3] 3 Years	1	100.0	73.9				1	1.0	0.0	100.0	73.9	26.1	1.00
3 Years [3]		50.0	54.7										

Notes:

1. No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

2. A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

3. Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

4. The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

5. No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Inova Fairfax Hospital - Falls Church VA
Provider Number 490063 (VAFH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**6**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	33.3	724	33.9
	Single Right Lung Tx	4	66.7	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	4	66.7	1104	51.7
	36-49	2	33.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	2	33.3	633	29.6
	Male	4	66.7	1502	70.4
Donor Race	White	4	66.7	1649	77.2
	Black	2	33.3	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	2	33.3	695	32.6
	50+	4	66.7	874	40.9
Recipient Gender	Female	4	66.7	1129	52.9
	Male	2	33.3	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	5	83.3	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	1	16.7	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	6	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	6	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	6	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	4	66.7	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	33.3	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	1	16.7	401	18.8
	1992	1	16.7	535	25.1
	1993	2	33.3	660	30.9
	1994	2	33.3	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	100.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	0	0.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	25.0	103	14.4
	> 2.5 - 3.0 hrs	2	50.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	25.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

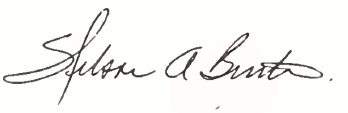
Source: UNOS OPTN/Scientific Registry data.

Response From: INOVA Fairfax Hospital
3300 Gallows Road, Falls Church, VA 22046
Provider Number 490063 (VAFH)

May 1, 1996

The INOVA Transplant Center at Fairfax Hospital started a lung transplant program in 1991. The UNOS survival statistics reported here are for the first 6 patients that received lung transplants. Because of this small number, the significance of the reported survival statistics is uncertain. There have been an additional 12 patients transplanted at our center since these first 6 patients. In addition to patients with COPD, these recipients have included patients with pulmonary fibrosis and pulmonary hypertension. The INOVA Transplant Center is dedicated to the success of its lung transplant program; this was exemplified last year with the recruitment of a full-time dedicated medical director. An ongoing goal is to provide care of the highest quality, and to meet all the needs of our patients and their families, in a cost-efficient manner.

Nelson Burton, M.D.
Surgical Director, Heart & Lung Transplantation



Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Medical College of Virginia Hospitals - Richmond VA
Provider Number 490032 (VAMC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	80.0	93.0	7	85.7	90.2	12	12	2	83.3	91.4	-8.0	0.31
1 Year	5	80.0	77.9	7	71.4	69.6	12	12	3	75.0	73.1	1.9	0.87
Cond. [3] 3 Years	4	25.0	75.3				4	4	3	25.0	75.3	-50.3	0.05*
3 Years [3]		20.0	58.7										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	5	80.0	93.4	7	85.7	90.7	12	12.0	2.0	83.3	91.8	-8.5	0.28
1 Year	5	80.0	78.8	7	71.4	70.9	12	12.0	3.0	75.0	74.2	0.8	0.94
Cond. [3] 3 Years	4	25.0	77.0				4	4.0	3.0	25.0	77.0	-52.0	0.04*
3 Years [3]		20.0	60.6										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Medical College of Virginia Hospitals - Richmond VA
Provider Number 490032 (VAMC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**12**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	5	41.7	724	33.9
	Single Right Lung Tx	6	50.0	714	33.4
	Double Lung Tx	1	8.3	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	16.7	449	21.0
	18-35	7	58.3	1104	51.7
	36-49	2	16.7	410	19.2
	50+	1	8.3	85	4.0
Donor Gender	Female	3	25.0	633	29.6
	Male	9	75.0	1502	70.4
Donor Race	White	9	75.0	1649	77.2
	Black	3	25.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	3	25.0	440	20.6
	36-49	4	33.3	695	32.6
	50+	5	41.7	874	40.9
Recipient Gender	Female	8	66.7	1129	52.9
	Male	4	33.3	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	12	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	12	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	12	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	7	58.3	1805	84.5
	Hospitalized	4	33.3	180	8.4
	In ICU	1	8.3	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	7	58.3	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	16.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	1	8.3	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	1	8.3	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	8.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	3	25.0	401	18.8
	1992	4	33.3	535	25.1
	1993	5	41.7	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	1	20.0	104	14.4
	> 3.5 - 4.0 hrs	2	40.0	211	29.1
	> 4.0 hrs	2	40.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	3	50.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	3	50.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	1	100.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	1	100.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for McGuire VA Medical Center - Richmond VA
Provider Number 49010F (VAMV)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	68.2	2	100.0	88.2	3	3	1	66.7	81.5	-14.9	0.46
1 Year	1	0.0	60.1	2	50.0	63.7	3	3	2	33.3	62.5	-29.2	0.56
Cond. [3] 3 Years													
3 Years [3]													

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	0.0	69.4	2	100.0	88.2	3	3.0	1.0	66.7	81.9	-15.3	0.45
1 Year	1	0.0	60.3	2	50.0	65.7	3	3.0	2.0	33.3	63.9	-30.6	0.56
Cond. [3] 3 Years													
3 Years [3]													

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

McGuire VA Medical Center - Richmond VA
Provider Number 49010F (VAMV)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**3**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	1	33.3	724	33.9
	Single Right Lung Tx	2	66.7	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	33.3	449	21.0
	18-35	2	66.7	1104	51.7
	36-49	0	0.0	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	3	100.0	1502	70.4
Donor Race	White	1	33.3	1649	77.2
	Black	2	66.7	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	0	0.0	440	20.6
	36-49	3	100.0	695	32.6
	50+	0	0.0	874	40.9
Recipient Gender	Female	0	0.0	1129	52.9
	Male	3	100.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	3	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	3	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	3	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	1	33.3	1805	84.5
	Hospitalized	2	66.7	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	0	0.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	2	66.7	305	14.3
	Primary Pulmonary Hypertension	1	33.3	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	1	33.3	401	18.8
	1992	1	33.3	535	25.1
	1993	1	33.3	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	100.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	50.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	1	50.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Sentara Norfolk General Hospital - Norfolk VA
Provider Number 490007 (VANG)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	94.0	5	40.0	84.7	6	6	3	50.0	86.2	-36.2	<0.01*
1 Year	1	100.0	78.9	5	40.0	67.6	6	6	3	50.0	69.5	-19.5	0.29
Cond. [3] 3 Years	1	100.0	72.3				1	0	0	100.0	72.3	27.7	1.00
3 Years [3]		100.0	57.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	94.3	5	40.0	85.6	6	6.0	3.0	50.0	87.0	-37.0	<0.01*
1 Year	1	100.0	79.4	5	40.0	69.1	6	6.0	3.0	50.0	70.8	-20.8	0.25
Cond. [3] 3 Years	1	100.0	72.7				1	0.0	0.0	100.0	72.7	27.3	1.00
3 Years [3]		100.0	57.7										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Sentara Norfolk General Hospital - Norfolk VA
Provider Number 490007 (VANG)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**6**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	4	66.7	724	33.9
	Single Right Lung Tx	1	16.7	714	33.4
	Double Lung Tx	1	16.7	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	4	66.7	1104	51.7
	36-49	2	33.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	4	66.7	633	29.6
	Male	2	33.3	1502	70.4
Donor Race	White	3	50.0	1649	77.2
	Black	3	50.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	2	33.3	440	20.6
	36-49	2	33.3	695	32.6
	50+	2	33.3	874	40.9
Recipient Gender	Female	3	50.0	1129	52.9
	Male	3	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	5	83.3	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	1	16.7	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	6	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	5	83.3	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	1	16.7	51	2.4
Medical Condition at Transplant	Not Hospitalized	5	83.3	1805	84.5
	Hospitalized	1	16.7	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	0	0.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	1	16.7	231	10.8
	Eisenmenger's Syndrome/Congenital	1	16.7	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	1	16.7	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	3	50.0	535	25.1
	1993	3	50.0	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	50.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	1	25.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	1	25.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	0	0.0	218	30.5
	> 4.0 hrs	1	100.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	1	100.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	1	100.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response from: Sentara Norfolk General Hospital
600 Gresham Drive, Norfolk, VA 23507
Provider Number 490007 (VANG)

April 29, 1997

Sentara Norfolk General Hospital began its lung transplant program in April of 1992 and from that day until April 30, 1994, Sentara has performed six lung transplants with an overall transplant survival of 50% at one year. Although this is different from the national average of 69%, it does not reach statistical significance. We feel the lower survival rate is due to the low volume of transplants performed in this time period. As with many transplant programs the beginning years are notable for low referral rates of usually more complex and sicker patients. If one carefully examines the patients done in the time period before 1994, it is apparent that the Sentara Lung Transplant Program transplanted two times the national average of hospitalized patients and 2½ times the national average of patients with complex primary and secondary pulmonary hypertension.

Since April of 1994, Sentara has performed an additional 16 pulmonary transplants. Of the 22 total transplants performed, 69% are alive at one year. This is identical to the national expected survival rate of 69.4%. We believe that substantially improved transplant results in the era since 1994 is an accurate reflection of the commitment to care and standards of excellence found at Sentara Norfolk General Hospital. They are a reflection of our multi-disciplinary approach with careful pre-transplant, operative and post-transplant follow-up with close cooperation among pulmonary transplant physicians, surgeons and other specialists. The pulmonary transplant program at Sentara has become an integral part of the heart transplant program and shares the same support facilities with it and our large renal transplant program.

We believe that lung transplantation is an evolving field and it is apparent from our improvement in results that the program has undergone an evolutionary process which has enabled it to have survival rates equal to those experienced nationwide. Sentara Norfolk General Hospital met stringent membership criteria in order to become a UNOS approved lung transplant facility and we will endeavor to continue providing the finest patient care available found anywhere in the United States.

Jeffrey B. Rich, M.D.
Director, Heart-Lung and Heart Transplantation Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Virginia Health Science Center - Charlottesville VA
Provider Number 490009 (VAUV)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	17	76.5	86.5	34	94.1	91.0	51	51	6	88.2	89.5	-1.2	0.76
1 Year	17	64.7	69.4	34	73.2	74.3	51	50	15	70.3	72.6	-2.3	0.69
Cond. [3] 3 Years	11	100.0	76.8				11	9	0	100.0	76.8	23.2	0.08
3 Years [3]		64.7	53.3										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	16	81.3	88.5	34	94.1	91.3	50	50.0	5.0	90.0	90.4	-0.4	0.92
1 Year	16	68.8	71.9	34	73.2	74.6	50	49.0	14.0	71.7	73.7	-2.0	0.74
Cond. [3] 3 Years	11	100.0	77.2				11	9.0	0.0	100.0	77.2	22.8	0.08
3 Years [3]		68.8	55.5										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Virginia Health Science Center - Charlottesville VA
Provider Number 490009 (VAUV)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**51**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	21	41.2	724	33.9
	Single Right Lung Tx	19	37.3	714	33.4
	Double Lung Tx	11	21.6	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	13	25.5	449	21.0
	18-35	29	56.9	1104	51.7
	36-49	7	13.7	410	19.2
	50+	2	3.9	85	4.0
Donor Gender	Female	11	21.6	633	29.6
	Male	40	78.4	1502	70.4
Donor Race	White	46	90.2	1649	77.2
	Black	5	9.8	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	1	2.0	76	3.6
	18-35	5	9.8	440	20.6
	36-49	8	15.7	695	32.6
	50+	37	72.5	874	40.9
Recipient Gender	Female	25	49.0	1129	52.9
	Male	26	51.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	50	98.0	1948	91.2
	Black	1	2.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	50	98.0	2062	96.6
	Yes	1	2.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	49	96.1	2004	93.9
	Yes	2	3.9	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	49	96.1	1805	84.5
	Hospitalized	1	2.0	180	8.4
	In ICU	1	2.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	27	52.9	710	33.3
	Fibrosis (Cystic/Idiopathic)	7	13.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	7	13.7	305	14.3
	Primary Pulmonary Hypertension	4	7.8	231	10.8
	Eisenmenger's Syndrome/Congenital	1	2.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	5	9.8	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	3	5.9	202	9.5
	1991	8	15.7	401	18.8
	1992	17	33.3	535	25.1
	1993	18	35.3	660	30.9
	1994	5	9.8	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	2	9.5	120	16.6
	> 2.5 - 3.0 hrs	1	4.8	106	14.6
	> 3.0 - 3.5 hrs	5	23.8	104	14.4
	> 3.5 - 4.0 hrs	10	47.6	211	29.1
	> 4.0 hrs	3	14.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	4	21.1	103	14.4
	> 2.5 - 3.0 hrs	2	10.5	95	13.3
	> 3.0 - 3.5 hrs	3	15.8	114	16.0
	> 3.5 - 4.0 hrs	9	47.4	218	30.5
	> 4.0 hrs	1	5.3	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	4	36.4	125	17.9
	> 3.5 - 4.5 hrs	1	9.1	145	20.8
	> 4.5 - 5.5 hrs	1	9.1	155	22.2
	> 5.5 - 6.5 hrs	3	27.3	126	18.1
	> 6.5 hrs	2	18.2	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	5	45.5	161	23.1
	> 3.5 - 4.5 hrs	3	27.3	165	23.7
	> 4.5 - 5.5 hrs	3	27.3	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for Sacred Heart Medical Center - Spokane WA
Provider Number 500054 (WASH)

Graft Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of TX	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of TX	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	9	100.0	85.1	11	72.7	88.1	20	20	3	85.0	86.8	-1.8	0.80
1 Year	9	77.8	64.9	11	45.5	69.7	20	20	8	60.0	67.5	-7.5	0.44
Cond. [3] 3 Years	7	85.7	78.7				7	7	1	85.7	78.7	7.0	0.65
3 Years [3]		66.7	51.1										

Patient Survival

Time Point	Era 1: 1/1/88-4/30/92 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Era 2: 5/1/92-4/30/94 No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	Overall: 1/1/88-4/30/94 No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	9	100.0	86.0	11	72.7	88.6	20	20.0	3.0	85.0	87.4	-2.4	0.72
1 Year	9	77.8	66.5	11	45.5	70.6	20	20.0	8.0	60.0	68.8	-8.8	0.36
Cond. [3] 3 Years	7	85.7	79.3				7	7.0	1.0	85.7	79.3	6.4	0.67
3 Years [3]		66.7	52.7										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

Sacred Heart Medical Center - Spokane WA
Provider Number 500054 (WASH)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**20**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	10	50.0	724	33.9
	Single Right Lung Tx	8	40.0	714	33.4
	Double Lung Tx	2	10.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	0	0.0	449	21.0
	18-35	10	50.0	1104	51.7
	36-49	5	25.0	410	19.2
	50+	5	25.0	85	4.0
Donor Gender	Female	11	55.0	633	29.6
	Male	9	45.0	1502	70.4
Donor Race	White	18	90.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	2	10.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	5.0	440	20.6
	36-49	8	40.0	695	32.6
	50+	11	55.0	874	40.9
Recipient Gender	Female	6	30.0	1129	52.9
	Male	14	70.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	20	100.0	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	20	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	18	90.0	2004	93.9
	Yes	2	10.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	14	70.0	1805	84.5
	Hospitalized	3	15.0	180	8.4
	In ICU	3	15.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	10	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	2	10.0	570	26.7
	Alpha-1-Antitrypsin Deficiency	7	35.0	305	14.3
	Primary Pulmonary Hypertension	1	5.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	0	0.0	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	8	40.0	401	18.8
	1992	4	20.0	535	25.1
	1993	7	35.0	660	30.9
	1994	1	5.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	2	20.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	4	40.0	211	29.1
	> 4.0 hrs	4	40.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	1	12.5	114	16.0
	> 3.5 - 4.0 hrs	3	37.5	218	30.5
	> 4.0 hrs	4	50.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	1	50.0	126	18.1
	> 6.5 hrs	1	50.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	50.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	1	50.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Washington Medical Center - Seattle WA
Provider Number 500008 (WAUW)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	91.0	25	96.0	92.1	27	27	1	96.3	92.0	4.3	0.40
1 Year	2	100.0	71.2	25	88.0	77.2	27	27	3	88.9	76.7	12.2	0.13
Cond. [3] 3 Years	2	50.0	73.2				2	2	1	50.0	73.2	-23.2	0.46
3 Years [3]		50.0	52.1										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94							
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	2	100.0	91.0	25	96.0	92.5	27	27.0	1.0	96.3	92.4	3.9	0.44
1 Year	2	100.0	70.4	25	88.0	78.2	27	27.0	3.0	88.9	77.6	11.3	0.15
Cond. [3] 3 Years	2	50.0	74.6				2	2.0	1.0	50.0	74.6	-24.6	0.44
3 Years [3]		50.0	52.5										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Washington Medical Center - Seattle WA
Provider Number 500008 (WAUW)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**27**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	13	48.1	724	33.9
	Single Right Lung Tx	9	33.3	714	33.4
	Double Lung Tx	5	18.5	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	2	7.4	54	2.5
	11-17	2	7.4	449	21.0
	18-35	14	51.9	1104	51.7
	36-49	9	33.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	9	33.3	633	29.6
	Male	18	66.7	1502	70.4
Donor Race	White	26	96.3	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	1	3.7	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	4	14.8	440	20.6
	36-49	14	51.9	695	32.6
	50+	9	33.3	874	40.9
Recipient Gender	Female	14	51.9	1129	52.9
	Male	13	48.1	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	26	96.3	1948	91.2
	Black	0	0.0	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	1	3.7	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	27	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	27	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	27	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	11	40.7	710	33.3
	Fibrosis (Cystic/Idiopathic)	5	18.5	570	26.7
	Alpha-1-Antitrypsin Deficiency	6	22.2	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	1	3.7	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	4	14.8	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	12	44.4	535	25.1
	1993	13	48.1	660	30.9
	1994	2	7.4	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	7.7	106	14.6
	> 3.0 - 3.5 hrs	1	7.7	104	14.4
	> 3.5 - 4.0 hrs	3	23.1	211	29.1
	> 4.0 hrs	8	61.5	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	3	33.3	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	2	22.2	218	30.5
	> 4.0 hrs	4	44.4	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	1	20.0	125	17.9
	> 3.5 - 4.5 hrs	1	20.0	145	20.8
	> 4.5 - 5.5 hrs	1	20.0	155	22.2
	> 5.5 - 6.5 hrs	1	20.0	126	18.1
	> 6.5 hrs	1	20.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	2	40.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	1	20.0	140	20.1
	> 5.5 - 6.5 hrs	1	20.0	86	12.3
	> 6.5 hrs	1	20.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: University of Washington Medical Center
1959 NE Pacific Street, Seattle, WA 98195
Provider Number 500008 (WAUW)

May 8, 1997

The University of Washington Lung Transplant Program consists of a multidisciplinary team dedicated to providing outstanding transplant care with compassion, integrity, and respect for individual dignity. The program is committed to improving our expertise through innovative research and continuous education in order to give patients with organ failure an opportunity to pursue a higher quality of life. This commitment is reflected in this UNOS report which reveals that our patient and graft survival rates continue to be significantly better than expected despite the complex patients that are referred to our institution for transplantation.

The University of Washington Medical Center provides a full range of transplantation expertise including kidney, pancreas, liver, heart, and lung transplantation. The University of Washington Medical Center has been ranked among the top hospitals in the country according to the U.S. News and World Report in 1996 annual guide to "America's Best Hospitals". In addition, the University of Washington School of Medicine recently celebrated fifty years of teaching, research, and patient care and ranks in the top 10 schools for NIH research dollars.

Douglas E. Wood, MD
Director, UW Lung Transplant Program

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for John L. Doyne Hospital - Milwaukee WI
Provider Number 520174 (WIMC)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	3	100.0	86.8	6	100.0	90.3	9	9	0	100.0	89.2	10.8	0.29
1 Year	3	100.0	64.9	6	83.3	77.0	9	9	1	88.9	73.0	15.9	0.27
Cond. [3] 3 Years	3	33.3	82.3				3	3	2	33.3	82.3	-49.0	0.08
3 Years [3]		33.3	53.4										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	3	100.0	87.7	6	100.0	91.7	9	9.0	0.0	100.0	90.3	9.7	0.32
1 Year	3	100.0	66.6	6	83.3	78.6	9	9.0	1.0	88.9	74.6	14.3	0.31
Cond. [3] 3 Years	3	33.3	82.2				3	3.0	2.0	33.3	82.2	-48.9	0.08
3 Years [3]		33.3	54.8										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

John L. Doyne Hospital - Milwaukee WI
Provider Number 520174 (WIMC)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**9**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	2	22.2	724	33.9
	Single Right Lung Tx	1	11.1	714	33.4
	Double Lung Tx	6	66.7	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	2	22.2	449	21.0
	18-35	3	33.3	1104	51.7
	36-49	4	44.4	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	3	33.3	633	29.6
	Male	6	66.7	1502	70.4
Donor Race	White	6	66.7	1649	77.2
	Black	2	22.2	295	13.8
	Hispanic	1	11.1	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	5	55.6	440	20.6
	36-49	0	0.0	695	32.6
	50+	4	44.4	874	40.9
Recipient Gender	Female	3	33.3	1129	52.9
	Male	6	66.7	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	8	88.9	1948	91.2
	Black	1	11.1	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	9	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	9	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	8	88.9	1805	84.5
	Hospitalized	1	11.1	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	2	22.2	710	33.3
	Fibrosis (Cystic/Idiopathic)	4	44.4	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	3	33.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	2	22.2	401	18.8
	1992	2	22.2	535	25.1
	1993	4	44.4	660	30.9
	1994	1	11.1	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	0	0.0	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	2	100.0	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	0	0.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	100.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	2	33.3	145	20.8
	> 4.5 - 5.5 hrs	1	16.7	155	22.2
	> 5.5 - 6.5 hrs	1	16.7	126	18.1
	> 6.5 hrs	2	33.3	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	3	50.0	161	23.1
	> 3.5 - 4.5 hrs	1	16.7	165	23.7
	> 4.5 - 5.5 hrs	1	16.7	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	1	16.7	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Response From: John L. Doyne Hospital
9200 W. Wisconsin Avenue, Milwaukee, WI 53226
Provider Number 520174 (WIMC)

May 14, 1997

The center-specific report on lung transplant survival at the John L. Doyne Hospital in Milwaukee reflects the early period of the lung transplant program at the Medical College of Wisconsin in Milwaukee. Despite an overall small number of lung transplants, review of the specific data demonstrates a strong institutional commitment to the transplant program in an organized, consistent team approach. With the closing of the John L. Doyne Hospital at the end of 1995, the lung transplant program has been continued in its same successful structure at the Froedtert Memorial Lutheran Hospital, now the major teaching affiliate of the Medical College of Wisconsin.

One year and two year survival statistics are currently 90% and 82% respectively for the entire group of adult lung transplants. Within the transplanted group, higher risk patients have been transplanted with equal success as lower risk patients. The need for double lung transplants (almost double in frequency to the national statistics) reflects a higher incidence of cystic fibrosis patients and patients with complex fibrotic problems such as post-radio/chemotherapy and eosinophilic granuloma. Our donor and recipient characteristics reflect national trends. No retransplantations have been done at the center to date, primarily because potential recipients have had significant contraindications to transplantation.

One month and one year data are better than expected for the program as a whole, as is two year data which is not reflected in the included tables. Conditional three year data is slightly lower than expected, although this trend does not reach statistical significance because of the low patient numbers involved. One of the two patients that died developed a lung cancer in his remaining native lung. The second patient died secondary to irreversible changes from a self-medication change. Subsequent conditional three year survival rate has been very satisfactory at 68% as the program has acquired larger overall numbers of transplanted patients. All surviving patients remain functional, out of the hospital, and off oxygen.

Our results at the Medical College of Wisconsin lung transplant program demonstrate that high quality lung transplantation can be achieved in a smaller program with an organized, multi-disciplinary team and a high degree of institutional commitment.

George B. Haasler, M.D.
Director, Thoracic Surgery and Lung Transplant Programs

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for St Luke's Medical Center - Milwaukee WI
Provider Number 520138 (WISL)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	90.1	5	60.0	92.4	6	6	2	66.7	92.0	-25.3	0.02*
1 Year	1	100.0	68.6	5	60.0	75.3	6	6	2	66.7	74.2	-7.5	0.67
Cond. [3] 3 Years	1	100.0	74.8				1	1	0	100.0	74.8	25.2	1.00
3 Years [3]		100.0	51.3										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts.[4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	1	100.0	90.4	5	60.0	92.8	6	6.0	2.0	66.7	92.4	-25.7	0.02*
1 Year	1	100.0	69.3	5	60.0	75.8	6	6.0	2.0	66.7	74.7	-8.1	0.64
Cond. [3] 3 Years	1	100.0	76.1				1	1.0	0.0	100.0	76.1	23.9	1.00
3 Years [3]		100.0	52.7										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

St Luke's Medical Center - Milwaukee WI
Provider Number 520138 (WISL)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**6**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	3	50.0	724	33.9
	Single Right Lung Tx	3	50.0	714	33.4
	Double Lung Tx	0	0.0	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	16.7	449	21.0
	18-35	3	50.0	1104	51.7
	36-49	2	33.3	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	0	0.0	633	29.6
	Male	6	100.0	1502	70.4
Donor Race	White	4	66.7	1649	77.2
	Black	2	33.3	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	1	16.7	440	20.6
	36-49	2	33.3	695	32.6
	50+	3	50.0	874	40.9
Recipient Gender	Female	2	33.3	1129	52.9
	Male	4	66.7	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	5	83.3	1948	91.2
	Black	1	16.7	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	6	100.0	2062	96.6
	Yes	0	0.0	64	3.0
	Not Reported	0	0.0	9	0.4
On Ventilator at Transplant	No	6	100.0	2004	93.9
	Yes	0	0.0	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	6	100.0	1805	84.5
	Hospitalized	0	0.0	180	8.4
	In ICU	0	0.0	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	3	50.0	710	33.3
	Fibrosis (Cystic/Idiopathic)	1	16.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	0	0.0	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	2	33.3	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	0	0.0	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	0	0.0	401	18.8
	1992	5	83.3	535	25.1
	1993	1	16.7	660	30.9
	1994	0	0.0	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	0	0.0	120	16.6
	> 2.5 - 3.0 hrs	1	33.3	106	14.6
	> 3.0 - 3.5 hrs	0	0.0	104	14.4
	> 3.5 - 4.0 hrs	2	66.7	211	29.1
	> 4.0 hrs	0	0.0	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	33.3	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	33.3	218	30.5
	> 4.0 hrs	1	33.3	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	0	0.0	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	0	0.0	126	18.1
	> 6.5 hrs	0	0.0	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	0	0.0	161	23.1
	> 3.5 - 4.5 hrs	0	0.0	165	23.7
	> 4.5 - 5.5 hrs	0	0.0	140	20.1
	> 5.5 - 6.5 hrs	0	0.0	86	12.3
	> 6.5 hrs	0	0.0	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994

Survival Report for University of Wisconsin Hospital and Clinics - Madison WI
Provider Number 520098 (WIUW)

Graft Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	Act. Rate (%)	Exp. Rate (%)	No. of TX	No. [1] w/CFU	No. Failed	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	3	66.7	80.1	15	93.3	89.9	18	18	2	88.9	88.3	0.6	0.93
1 Year	3	33.3	61.6	15	80.0	74.2	18	18	5	72.2	72.1	0.2	0.99
Cond. [3] 3 Years	1	100.0	84.3				1	1	0	100.0	84.3	15.7	1.00
3 Years [3]		33.3	51.9										

Patient Survival

	Era 1: 1/1/88-4/30/92			Era 2: 5/1/92-4/30/94			Overall: 1/1/88-4/30/94						
Time Point	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	Act. Rate (%)	Exp. Rate (%)	No. of Pts. [4]	No. [1,5] w/CFU	No. [5] Died	Act. Rate (%)	Exp. Rate (%)	Diff. (%)	p- [2] value
1 Month	3	66.7	80.6	13	100.0	91.7	16	16.0	1.0	93.7	89.7	4.1	0.57
1 Year	3	33.3	63.6	13	92.3	78.1	16	16.0	3.0	81.3	75.4	5.9	0.56
Cond. [3] 3 Years	1	100.0	82.3				1	1.0	0.0	100.0	82.3	17.7	1.00
3 Years [3]		33.3	52.4										

Notes: [1] No. with complete follow-up (CFU) is the total of the number of patients (grafts) whose status was known during the specified time interval.

[2] A p-value followed by an * indicates that the difference is statistically significant at the 0.05 level.

[3] Conditional 3 year survival rates are the survival rates conditional on survival at 1 year. These are computed based on transplants between 1/1/88 and 4/30/92. Three year survival rates are computed by multiplying the 1 year and the conditional 3 year survival rates.

[4] The numbers of patients in Era 1 and Era 2 do not necessarily add up to the number of patients in the overall period, due to repeat transplants in different eras for some patients.

[5] No. w/CFU or No. Died may be fractional if patients received more than one transplant at the program.

Source: UNOS OPTN/Scientific Registry data.

Lung Transplants: January 1, 1988 - April 30, 1994
Donor and Recipient Characteristics: Program and National Frequencies

University of Wisconsin Hospital and Clinics - Madison WI
Provider Number 520098 (WIUW)

		----- Program -----		--- National ---	
		Number	%	Number	%
Total Transplants and Percentages		**18**	**100.0**	**2135**	**100.0**
Type of Transplant	Single Left Lung Tx	9	50.0	724	33.9
	Single Right Lung Tx	2	11.1	714	33.4
	Double Lung Tx	7	38.9	697	32.6
Donor Age	0-5	0	0.0	33	1.5
	6-10	0	0.0	54	2.5
	11-17	1	5.6	449	21.0
	18-35	9	50.0	1104	51.7
	36-49	8	44.4	410	19.2
	50+	0	0.0	85	4.0
Donor Gender	Female	9	50.0	633	29.6
	Male	9	50.0	1502	70.4
Donor Race	White	18	100.0	1649	77.2
	Black	0	0.0	295	13.8
	Hispanic	0	0.0	166	7.8
	Asian	0	0.0	14	0.7
	Other	0	0.0	8	0.4
	Not Reported	0	0.0	3	0.1
Recipient Age	0-5	0	0.0	25	1.2
	6-10	0	0.0	25	1.2
	11-17	0	0.0	76	3.6
	18-35	5	27.8	440	20.6
	36-49	6	33.3	695	32.6
	50+	7	38.9	874	40.9
Recipient Gender	Female	9	50.0	1129	52.9
	Male	9	50.0	1006	47.1

		----- Program -----		--- National ---	
		Number	%	Number	%
Recipient Race	White	17	94.4	1948	91.2
	Black	1	5.6	85	4.0
	Hispanic	0	0.0	58	2.7
	Asian	0	0.0	17	0.8
	Other	0	0.0	24	1.1
	Not Reported	0	0.0	3	0.1
Previous Lung Transplant	No	15	83.3	2062	96.6
	Yes	2	11.1	64	3.0
	Not Reported	1	5.6	9	0.4
On Ventilator at Transplant	No	17	94.4	2004	93.9
	Yes	1	5.6	80	3.7
	Not Reported	0	0.0	51	2.4
Medical Condition at Transplant	Not Hospitalized	14	77.8	1805	84.5
	Hospitalized	3	16.7	180	8.4
	In ICU	1	5.6	141	6.6
	Not Reported	0	0.0	9	0.4
Patient Diagnosis at Transplant	COPD/Emphysema	7	38.9	710	33.3
	Fibrosis (Cystic/Idiopathic)	3	16.7	570	26.7
	Alpha-1-Antitrypsin Deficiency	3	16.7	305	14.3
	Primary Pulmonary Hypertension	0	0.0	231	10.8
	Eisenmenger's Syndrome/Congenital	0	0.0	96	4.5
	Retransplant	0	0.0	14	0.7
	Other	5	27.8	204	9.6
	Not Reported	0	0.0	5	0.2
Year of Transplant	1988	1	5.6	33	1.5
	1989	0	0.0	92	4.3
	1990	0	0.0	202	9.5
	1991	1	5.6	401	18.8
	1992	2	11.1	535	25.1
	1993	8	44.4	660	30.9
	1994	6	33.3	212	9.9

		----- Program -----		--- National ---	
		Number	%	Number	%
Cold Ischemia Time:					
Single Lung, Left	Up to 2.5 hrs	1	11.1	120	16.6
	> 2.5 - 3.0 hrs	1	11.1	106	14.6
	> 3.0 - 3.5 hrs	1	11.1	104	14.4
	> 3.5 - 4.0 hrs	3	33.3	211	29.1
	> 4.0 hrs	3	33.3	166	22.9
	Not Reported	0	0.0	17	2.3
Single Lung, Right	Up to 2.5 hrs	1	50.0	103	14.4
	> 2.5 - 3.0 hrs	0	0.0	95	13.3
	> 3.0 - 3.5 hrs	0	0.0	114	16.0
	> 3.5 - 4.0 hrs	1	50.0	218	30.5
	> 4.0 hrs	0	0.0	165	23.1
	Not Reported	0	0.0	19	2.7
Double Lung, Left	Up to 3.5 hrs	0	0.0	125	17.9
	> 3.5 - 4.5 hrs	1	14.3	145	20.8
	> 4.5 - 5.5 hrs	0	0.0	155	22.2
	> 5.5 - 6.5 hrs	2	28.6	126	18.1
	> 6.5 hrs	4	57.1	118	16.9
	Not Reported	0	0.0	28	4.0
Double Lung, Right	Up to 3.5 hrs	1	14.3	161	23.1
	> 3.5 - 4.5 hrs	1	14.3	165	23.7
	> 4.5 - 5.5 hrs	3	42.9	140	20.1
	> 5.5 - 6.5 hrs	1	14.3	86	12.3
	> 6.5 hrs	1	14.3	99	14.2
	Not Reported	0	0.0	46	6.6

Source: UNOS OPTN/Scientific Registry data.

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